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Original Department.

Lecture.

CARDIAC DEGENERATION.*

BY PROF. WILLIAM H. DRAPER, M. D.,

Of New York.

Gentlemen: The physiognomy of this man is a very characteristic one, and it is just such as you often see in hospitals, when cardiac and renal disease attack the obese and dissipated.

The history of this man has not yet been taken, but he says that he is sixty-two years of age, and he weighs 215 pounds. He has been a policeman on night duty ever since the riot of 1863, and he has been able to do that duty satisfactorily until the past two or three days, and now he finds himself embarrassed by asthma, as he says. You are to understand by this that he uses the term asthma as some professional men often use it, in a general sense. We do not as largely as we should confine that term to the strict definition of that neurosis with a distinct spasmodic character, which is true asthma.

Now, we will proceed at once to the objective examination; and let us suppose that this man could tell us nothing about his subjective history, and let us see how far towards the diagnosis the objective examination will lead us, without asking him any questions.

Inspection.—In the legs there is moderate œdema, and some varicosity of the veins. Then, as we come higher up, we find a very protuberant belly, which may be wholly due to the deposition of a large amount of fat, or partly to that and partly to the distension of the peritoneal cavity with water, gas, or something else. And this is the point to determine by further explorations.

Percussion.—I get some dullness in the line of the posterior spine of the ilium on the left side of the abdomen, but that may be due to deposition of a thick layer of fat. I find dullness in the same line on the right side of the abdominal cavity; but elsewhere there is resonance. There is a visible fluctuation such as you will often see in as fat a belly as this, and I do not think that there is any fluid in the abdominal cavity. The region of hepatic dullness extends below the ordinary line, and well up towards the nipple. I find no evidence by percussion of any considerable cardiac hypertrophy, and the cardiac pulsation is so feeble that I cannot find the apex beat. On percussion of the chest I find very good resonance in front, or perhaps an exaggerated degree of resonance, especially when you consider the thickness of the layer of fat which is lying over the chest walls.

Auscultation.—The respiratory murmur is very good on both sides, but better upon the left. There is nothing in the way of a cardiac murmur, but simply a reduplication of the first sound of the heart. The inspiration is feeble and the expiration prolonged, and I get some moist and sonorous rales at the base of the lungs at the end of inspiration. There is no evidence of any pleuritic effusion, and the breathing is of that sort which is common in persons with some emphysema and chronic Bright's disease. Now, it would ordinarily be necessary for us to examine the urine before going farther in making the diagnosis. But the man has stated to us that the physician who attended him outside, said that he had Bright's disease. The ex-

*Abstract of clinical lecture.

amination of the urine, however, would have enabled us to determine this with only the objective signs to aid us. It is sometimes necessary to make this examination at the bedside, and so it is important that you should always have the means ready for drawing off and examining the urine. Now, we will suppose that we have examined the urine and found albumen in it. What other means of obtaining information could we seek for? We can observe the tongue; and here we find it rather pointed, shaky, and a little dry; and its appearance to me, or to any one accustomed to examine the tongues of hospital patients, would be extremely significant. Again, there is something else significant about him, and that is the appearance of the nose, and the skin of the cheeks. In both there is a very pronounced redness, and the follicles are very large, and the skin of the face is very coarse and has a rather hypertrophic look. He has what would be described by a dermatologist as an acne rosacea, and a consequent hyperplasia of the skin, that means in the great majority of cases alcoholic indulgence. And that, with the appearance of the tongue, and these quick, sharp, restless movements which you have observed, means that this man has been for a long time abusing the use of stimulants. But he says that he is not a hard drinker, and only takes occasionally, while on duty, a little birch beer or whisky. Now here, gentlemen, you see what you get when you come to the subjective history. What he says is entirely the opposite of the conclusions which we drew from the objective examination. But I would still believe in the correctness of my own opinion. This man does not intend to deceive, but he tells you the story which you will hear very often, and even from many patients of intelligence, and that is the very best story that he can tell.

Now, we have completed the objective examination, and we have come to several conclusions. First, that he has albuminuria; another, that he has a very weak heart, probably from muscular degeneration; another, that he has degenerated vessels, for the radial arteries are stiff; another, that he has a chronic bronchitis, and some pulmonary congestion; and another, that he has lately been trying to make himself feel better by taking an occasional glass of stimulant, and has thus aggravated rather than bettered his general condition.

The first thing to do in the treatment of this case is to purge him immediately, to relieve the pulmonary congestion, and also with the view of getting out of the blood vessels some of the alcohol which is circulating in them. And then we shall be better able to see how far the general tissue changes and the morbid state of the vital organs has gone, and how far they are susceptible of relief. The true state is now somewhat masked.

SOME INTERESTING PATHOLOGICAL SPECIMENS FROM A TYPHOID PATIENT.*

MEDICAL CLINIC BY MORRIS LONGSTRETH, M. D.,

Of Philadelphia.

The patient from whom the specimens were removed, died after being in the hospital two weeks; he was admitted complaining only of two days' illness. Had had chill, headache, and was drowsy. Some fever and looseness of bowels. On admission, his temperature was 102⅘°, but that night rose to 104⅘°; still higher the night following; then each rise was followed by a slight fall, though not the same as in normal typhoid fever. His nails were blue, the stools characteristic typhoid stools, and typical rose-colored spots; in fact, there were all the evidences of typhoid. Still, from the condition of the lungs and hectic, early tuberculosis was evident.

Lungs were congested, and auscultation revealed numerous rales. Though in life we found no real evidence of deposit, after death we find it, and also a condition of *general sepsis*. The patient had valvular heart disease, and as a result, alterations in the spleen, which probably terminated his life.

This organ is penetrated in various directions with large cavities—here a white spot, there a large broken-down mass. What are these masses? I notice all these cavities have a *lining membrane*, and contained hardened matter, which is not tuberculous, because tubercle never forms a capsule, or lining membrane; nor a morbid growth, for the same reason. We are therefore practically limited to emboli. (?) A bare possibility exists that it is abscess, but this is rare, for the patient would have died long before this condition was reached, and this is evidently of long-standing. It must have required at least six months to form this dense fibrous membrane. Let us trace the source of the embolus. There is nothing in the present condition of the heart to account for embolus; the source itself must be old, and

*Abstract of clinical lecture delivered at the Pennsylvania Hospital.

I find, to begin with, evidence of old endocarditis—evidence of inflammation capable of giving rise to embolus. The valves are thickened, and there is a white line along their edges; but this is not all, for immediately beneath is the pink line showing there was, at one time, an accumulation of fibrine on the valves, which was washed off by the blood-current and carried into the circulation, leaving the valves smooth.

He had a distinct mitral regurgitant murmur, and I find the mitral valves thickened. Going on to the aortic valve, it also is found thickened and fenestrated. These are just the sort of valves which in their fresh state of injury give rise to embolism. Here is also a fatty heart due probably to the insufficient supply of blood sent for its nourishment during life. A good mode of determining fatty heart is to squeeze the organ between the fingers and thumb, and the sensation is as if the muscular fibre were disappearing from beneath the touch.

The liver bears no evidence of acute inflammation, but presents the usual condition of typhoid fever. The intestines present nothing unusual. Peyer's patches contain the typical typhoid ulcers. A word here about how to distinguish typhoid from tubercular ulcers. Each has its own perfectly characteristic appearance. The base of typhoid ulcer after it is well formed where it is stained with feces is not complete, and the base is thin. The reason is that the point at which ulceration begins is in the follicles of Peyer's patches, elevating the patches as the abscess forms beneath the mucous membrane; the membrane lifts up like a trap-door to let out the matter. I have seen the mucous membrane covering one of these areas of ulceration completely lifted off and found in the stools. This inflammation, which begins in the sub-mucous layer and extends downward, the more the inflammation the more the swelling and the greater the danger of extending into the muscular coat, which, if it reaches down to the inner layer, there is perforation of the bowel, and hence whatever increases the fecal accumulation and pressure greatly increases the danger of perforation; while in tuberculous ulcer the base is thick, for the lymph is deposited layer upon layer, and upon the peritoneal surface as well. This is, I think, a safer guide in distinguishing these two forms of disease than the ordinary description given in books, *i. e.*, one running lengthwise with intestine, the other round—this is not reliable, for it is according to the relation of the intestinal vessels.

MEDICAL CLINIC—SERVICE OF DR. HUTCHINSON.

TREATMENT OF PERITYPHLITIS.

Robert Stone, aged 22, born in England, has been in hospital two weeks. Up to that time he had always enjoyed fair health, though at one time had some slight spitting of blood, which caused no trouble. His present attack was immediately following a heavy oyster feast. He was attacked with severe cramps, but started for work, and was soon picked up in a faint, and carried to hospital.

On admission, the urine was found normal, abdominal tenderness and pain, local of right side; peritonitis; bowels constipated. There was slight dullness at apex of right lung, and a functional heart murmur. His temperature was 104½°, and the pain in the abdomen quite severe. Large doses of opium were administered to prevent action of bowels, and the next day temperature fell to normal, but rose again on the day following. Opium was continued for five days.

In local peritonitis the typical position of flexed limbs is not always present, but in this case it was. This was probably a case of typhlitis and perityphlitis, which set up a local peritonitis — the immediate active cause being the large amount of oysters eaten. There was an unusual amount of pain and uneasiness from the first in this case. Typhlitis, or perityphlitis, should always receive active and prompt treatment, for it is a disease prone to advance, and may become, by extension of inflammation, extensive, even fatal peritonitis, or may have abscess from inflammation extending to the cellular tissue.

As to treatment: Keep bowels quiet, prevent peristalsis by large dose of opium, carefully watch respiration, but keep patient under opium while pain and tenderness continue; no remedy likely to do this with half the efficacy of opium. Inunctions of the oleate of mercury continued till gums are slightly touched, but avoid all purgatives. Nourishing food, but of a kind that will not distend the bowel—milk, beef tea, etc.

For this patient, five days after admission, when symptoms had subsided, we relieved the bowel by an enema, which was followed by a small stool. After convalescence on fifth day, there was a recurrence of rise of temperature, which cannot be easily accounted for. We thought possibly we might be treating with a tuberculous patient, but subsequent observation did not confirm this supposition; but on the whole, his condition is interesting. When I first saw him he was

in a state of collapse, prostrated; could not pass water. Though apparently convalescent, he cannot be allowed to leave hospital for some time, and will remain under observation.

COMMUNICATIONS.

OBSTETRIC FORCEPS.*

BY D. BENJAMIN, M. D.,

Of Camden, N. J.

GENTLEMEN: In lieu of preparing a paper on some medical subject, as requested by you, I shall simply make a few extemporaneous remarks on the subject of obstetric forceps.

It has been said that the obstetric forceps have relieved more suffering and pain of woman than any other invention or discovery known to the science of medicine. In view of the discovery of chloroform and ether, this can hardly be considered as absolutely true, but certain it is, that in the hour of her greatest need and suffering, the obstetric forceps has been a friend indeed to woman.

Since the invention of the forceps by Chamberlain in the beginning of the seventeenth century, there have been numerous modifications, changes, and improvements, and when we look at these original straight forceps of Chamberlain, it is a matter of surprise that so much could have been accomplished with them, and how many difficult cases have been and can be delivered by their aid. Another thing worthy of remark in this connection is the fact that the cephalic curve of those original instruments has scarcely been improved, if it has been improved at all, in any of the modern instruments.

Without going into a detailed history of the various instruments that have been introduced as modifications of the original Chamberlain forceps, I will confine myself more particularly to the two leading forceps of the day, viz., the "Simpson" or short forceps, and the "Hodge," and Wallace's modification of the "Hodge," long forceps.

For many years, Professor Penrose, of the University of Pennsylvania, has been highly recommending the Simpson forceps, and I recollect that, after using the Hodge forceps for awhile, I purchased a pair of Simpson forceps, and have been using them for a number of years. I found on a number of occasions, as the Professor had remarked, that no forceps could compare with them in the ease with which they could be applied, and in safety to the patient while being operated upon, and with this pair of Simpson's forceps which I hold in my hand I have delivered cases, in consultation with other physicians, where both the Hodge and Wallace's modification of the Hodge had utterly failed to deliver the child successfully.

In one instance the pubic artery had been cut and the vagina tamponed while I was sent for, and in two cases the child's occipital bone had been crushed.

I have also frequently noticed that in the many cases in which I have delivered with the Simpson forceps, in none of them have I ever marked or cut the head of the child, and in no case do I know of ever having injured or bruised the mother in any way, so that I have come to regard them as perfectly safe and incapable of harm to either the child or the mother, so long as the traction is properly applied, and the curvature of the pelvis borne in mind by the operator. One or two of the cases to which I refer will be remembered by one or two of the physicians present with us to-day.

Another matter which I have noticed particularly with the Simpson forceps, is that never in my experience have I known them to slip; and this is a very important consideration, for the slipping of the forceps is not only very dangerous to the child, but extremely dangerous to the mother, and has, perhaps, caused as much injury as any other accident in the use of the instrument.

In holding up these forceps alongside of the Hodge, or Wallace's, you can easily see that when the two pairs of forceps are closed, as I now hold them, and as they would naturally be held in an attempt at delivery, the blades of the Simpson are much wider apart than they are in either the Hodge or in Wallace's modification of the Hodge; you will notice that the Simpson forceps cannot dangerously or injuriously compress the head of the child, while the Hodge, and especially the Wallace modification of the Hodge, will, in almost every case—perhaps in ninety-nine out of one hundred—which will be delivered by the aid of the forceps, compress the head of the child very much, and if the fœtal head is compressed to the fullest extent permitted by these two last-named instruments, there is great danger not only to the brain of the child, but even to its life, unless the head be a very small one, as the greatest diameter between the blades of the Hodge and of Wallace's modification

*Address delivered before the Medical Society of Camden, N. J., annual meeting, September 28, 1886.

of the Hodge is scarcely more than two inches. But, as in most cases the Hodge and the Wallace forceps are not pressed as closely together as they will go, it will be found that the handles will be spread apart nearly one inch. When I spread the handles three-fourths of an inch to one inch, the blades will occupy about the position they would be in when applied to an ordinary fœtal head. You will observe in that case that they are about as far apart in the middle of the blades as the Simpson forceps when the handles of the Simpson are entirely closed; but you will see, when I hold them up together in this way, a very important difference, viz., that while the blades of the Hodge or the Wallace are almost parallel from the middle of the blades to the points, the pulling part of blades, the blades of the Simpson forceps have quite a strong curve, and this is evidently the reason why the long forceps frequently permit the head to slip from their grasp.

By placing my hand between the blades of the forceps in this way, in imitation of the fœtal head, you will see how readily it can be pulled out from the grasp of the Hodge or the Wallace; this is not the case, however, with the Simpson forceps, as they still have, when spread sufficiently to grasp the ordinary fœtal head, such a curvature as will not permit the head to slip, or the blades to spread easily. You will observe further, in comparing the cephalic curves of these different instruments, as I hold them up, both closed, that the points of the long forceps come very close together—about one-fourth of an inch apart. This compels them, when compressed by the hands of the practitioner, to slip either back of the neck of the child and back of the occipital bone, or forward, which is an additional reason why they should slip their grasp, as in no case could the neck of the child, or the base of its head, be so closely compressed as that; and the slipping either backward or forward not only endangers the life of the child, but, as you see, with their strong, sharp pelvic curve, the points of the forceps are either thrown injuriously against the mother's tissue in front, or the broad, convex surface against the mother's tissue posteriorly. Indeed, I regard them as very formidable instruments, capable of great compression and traction, when you can get them properly adjusted, and to hold. In *some* cases, however, I have found them better suited than the Simpson forceps, but not in the general run of cases in which forceps are used, and I certainly regard them as a more dangerous instrument than the Simpson, especially in the hands of the inexperienced, as the long handles give them great leverage and power.

Having mentioned some of the objectionable features of these long forceps, I would now mention some of the features of the Simpson which are also objectionable:

1. I found quite a number of cases where they were too short, either from obesity of the patient or the high position of the child; and,

2. From the want of a little more pelvic curve, the handles could not be sufficiently depressed to bring the blades well down upon the cheeks of the child or towards the base of the skull.

In view of these objectionable features in the different instruments, I got in the habit of carrying both the Wallace and the Simpson forceps, for I believe that in most cases where the Simpson cannot be used the Wallace would be applicable, not only on account of its great pelvic curve, but also on account of the length of its handles. It then occurred to me that if I could eliminate some of the objectionable features from the Wallace forceps and some of the objectionable features from the Simpson forceps—in other words, produce a forceps that would possess the good qualities of each—I could often do away with the necessity of carrying two or three pairs of forceps, and thus save time, and danger to the patient. Acting upon these thoughts I have produced this forceps which I now hold in my hand. You will observe that they have the Simpson blades, the Simpson cephalic curve, with a slightly increased pelvic curve. You will also see that they have the long handles of the Hodge and Wallace forceps, with the blunt hook which the Simpson forceps have not, and you will see, especially, that I have lengthened the shank and given them the Simpson lock and removed the wood. This gives them all the ease of application, all the safety to mother and child, all the firmness and grip of the Simpson forceps, with all the leverage and power of the long-handled forceps. The long shank is also a very good feature, as it enables the operator to apply them with ease above the superior strait as at the inferior strait, while at the same time you have the opening between the shanks through which to insert the finger, either for the purpose of traction or for the purpose of touching the fœtal head, also avoiding the frequent and troublesome pinching, which every practitioner must have noticed the short forceps of Simpson inflicted upon the patient

when an attempt was made to apply them high up. The spreading of the shanks is also an advantage, and the danger of tearing the perineum by the spread of the shanks before the fœtal had has become engaged in the external opening of the vagina, spoken of by Professor Hodge, is purely imaginary, as no forceps ever spread sufficiently in front of the child's head to cause a rupture of the perineum; at the same time should they spread sufficiently to cause a stretching of the perineum, it would only save the operator the trouble of the constant and frequent stretching by the fingers, now recommended in all cases to precede the pressure of the head upon the perineum.

It is claimed that this modification of the Simpson forceps will do *all* that the original does, and something *more*. That there is no wood, crevices, or seams to carry infection. That they are safer and easier of application than the Wallace, and therefore better adapted for *general* use, and for recent graduates.

No forceps, however, has ever been invented that will meet *every* case. Occasionally a special case will be found for some other shaped instrument.

In this connection I would like to mention a fact that has frequently been impressed upon my mind, and which I do not remember of having seen mentioned, viz: That the head does not push itself through the mouth of the womb in all cases, but that in, perhaps, the majority of cases, the shortening of the womb pulls its mouth back from over the head of the child. In other words, the child's head may come completely through the mouth of the womb without descending in the pelvis more than one-fourth of the distance necessary to produce such a result, if the mouth of the womb itself had not been drawn up into the abdomen. I would like to impress the idea that nature will, and does, at the expiration of the first stage, obliterate, to a great extent, the cervix, drawing it up from between the head of the child and the superior strait, stretching it out to such an extent that it is almost continuous with the vaginal wall, leaving, when on the stretch during a pain, little more than an elevation, or ring, around the inside of the hollow tube constituting the vagina and uterus. Bearing this in mind, it will be seen that the child's head will slip through the superior strait much more easily if you will wait until the uterus has been thoroughly drawn up, than if you apply your forceps before the mouth of the womb has been completely and entirely dilated; and no doubt most of the lacerations of the cervix, which are so common, have been produced either by imploring the patient to "bear down" during the first stage, or by the application of the forceps to the head of the child before the mouth of the womb has passed up to the child's neck. Indeed, the forceps should never be applied to the head of the child while it is covered by the womb, if it can be avoided, and they should always be removed after the head has been brought down to the perineum, except, of course, in those rare instances where puerperal convulsions, or some other grave complication, renders it imperative to make the most rapid delivery possible.

NOTE.—Benjamin's modification of the Simpson forceps is manufactured and sold by J. H. Gemrig & Sons, Phila.

EDITORIAL DEPARTMENT.

PERISCOPE.

Incidents in the Life and Labors of Louis Pasteur.

Dr. Samuel Bell thus writes in the *Medical Age:*

The subject of the following remarks was born in Dôle, France, in 1822. Throughout the greater part of his life he has been laboring for the advancement of science. At an early age he manifested a desire for scientific pursuits. His genius in that direction soon gave him the title of an able experimentalist. At the early age of thirty-two years he was made Dean of the Faculty of Sciences, at Lillel, a town in which one of the principal industries is the manufacture of alcohol from beet root. His investigative genius drifted towards the subject of fermentation. In 1857 he first gave his authoritative views with reference to the germ theory of fermentation, and by crucial experiments and demonstrations proved beyond a doubt the correctness of his statements. His next experiments were made upon wine and beer. After a series of investigations, Pasteur was led to recognize two distinct forms of microscopic life, one of which he termed the ærobies, which require

air, and the other the anærobies, which live without air. Both classes of these organisms conspire to accomplish the great work of keeping up the balance of nature, by giving back to life the material that is essential to its own production.

During the dark days of the supremacy of the commune in France, Pasteur was occupied in studying the little living ferment in beer and wine. Near the conclusion of the national war, he remarked that the "etiology of contagious disease was on the eve of having unexpected light shed upon it." In 1862 his attention was called to the deadly disease which was attacking sheep, cows, horses, and rabbits, and which was communicable to man, known generally under the name of splenic fever. After a careful study of the question, Pasteur affirmed that the living bacilli or micro-organisms which had been before discovered by Davanne and Rayer were the real cause of these terrible diseases. All the foregoing investigations and experiments were but the initial steps to greater and grander achievements. His marvelous career from this date commands our admiration and attention. Whilst he was engaged in his investigations into the nature of splenic fever, his attention was called to a destructive fever among fowls, called "the fowl-cholera." Pasteur soon discovered that a minute microbe was invariably present in the infected fowls, and that he could reproduce the disease at will by introducing these organisms into the blood of the healthy fowls. He also noticed that whenever a drop of liquid containing these microbes was mixed with the food which was given to the healthy fowls, the disease was communicated to them, manifesting itself through the membranes of the intestinal canal. He next found that he could multiply the microbe itself by feeding it artificially in a decoction of fowl-flesh, and that the minutest part of a drop of this artificial cultivation introduced on a needle point into a healthy fowl produced the disease, and severe enough to produce death. His keen investigative discernment now manifested itself to a remarkable degree. It occurred to him, as they were ærobic organisms and subject to the influence of the air, might not the virulence of the contagion be modified by allowing a certain length of time to intervene between the attenuation of the microbe and the inoculation. The attenuation was made, each cultivation was put into a glass flask, plugged with cotton-wool sufficient to prevent the ingress of any floating germ which might be in the atmosphere, and at the same time allowing the entrance of pure filtered air. Another inoculation was made, with the results just as foreseen by the great scientist. The fowls that were inoculated by this kind of virus in a few days became ill and feverish, but no deaths resulted. Another very important fact was established; that after an inoculation of the most deadly virus into fowls previously inoculated by the modified form, not one death ensued, proving the self-protective nature of the disease.

After this important discovery, he still farther prosecuted his studies and investigations with reference to splenic fever, called by the French charbon, by the Russians Siberian pest, and by the Germans milzbrandt. It is a disease which chiefly attacks the lower animals, cows, horses, sheep, and is very deadly and capable of being communicated to man. M. Pasteur stated before the International Medical Congress, which convened in London, in 1881, that France lost animals from charbon annually to the amount of 20,000,000 francs. It was discovered that this disease was also of a non-recurrent type. Did an unfortunate victim ever recover from an attack, immunity from the fatal disease was forever established.

Pasteur discovered that the microbe which produced this disease differed from the others he had studied, in that an attenuated form could not be produced by long exposure to the air. On February 28, 1881, he made the memorable announcement to the Academy of Sciences that he had succeeded in securing a protective vaccine for this most terrible disorder.

It was at once proposed that he should demonstrate the efficacy of this vaccination by a public experiment. Pasteur immediately acquiesced in the suggestion, and it was arranged that fifty sheep should be placed at his disposal, and that twenty-five of these should be subjected to two inoculations at intervals of from twelve to fifteen days, from two vaccines of unequal strength. Some days afterwards these twenty-five sheep, and at the same time the other twenty-five sheep which had not been vaccinated, should be simultaneously inoculated with the virus of virulent splenic fever. Ten cows were also provided, and treated after the same manner. On June 2, more than two hundred people assembled to witness the result. Out of the twenty-five sheep that were not inoculated, twenty-two were dead, and the remaining three dying. The remaining twenty-five which were vaccinated, were well and in good condition. The non-vaccinated cows had large swellings, intense fever, and ano-

rexia; the vaccinated cows were all in good condition. The demand for splenic vaccine became so great that M. Pasteur was obliged to establish a manufactory for splenic fever vaccine a short distance from his laboratory, and at the end of the year had vaccinated 39,346 animals. It was just previous to the above experiment that his daughter made the public statement that "her father would in the near future make some valuable developments in the scientific world." Whatever may be our opinion with reference to many of his previous experiments, the one narrated above has stood the closest criticism, and proved to a demonstration the value of his researches in connection with a very formidable disease. M. Pasteur, in his London address in 1881, stated that the renowned Lister, on reading his publication on milk fermentation in 1857, first received the inspiration which enabled him to mature the most valuable contributions which surgery had received during the present century. Dr. Davarue, who had also labored assiduously, and not without some success, in trying to find the cause of charbon, gave Pasteur the credit of first inspiring him, or suggesting to him ideas which led to his labors in the above direction, from reading his work on butyric fermentation and the vibrio which is characteristic of it—an instance of the evolution of genius. In 1868 a sad event happened to him, which, for a time, threatened his life—an attack of paralysis on one side. In the conviction that he was about to die, he dictated to his wife a note respecting some conclusions which he had arrived at, to be formally communicated to the Academy of Sciences. He said feelingly: "I regret to die. I should like to render more service to my country." Happily for the country he did not die, but he never regained the use of that limb. The French government gives him a pension of 25,000 francs annually, in order to encourage scientific investigations, a precedent which other countries would do well to follow. While many of his deductions are open to candid criticism, yet he has established enough to disarm critics in several directions, and is at the present time gaining the confidence of many of our most conservative minds.

The Rational Treatment of Nasal Catarrh.

Dr. A. G. Hobbs thus writes in the *Southern Med. Record:*

To treat successfully the diseases of the upper respiratory tract, it is necessary that we have a full knowledge of the various means of examining the diseased parts, else our diagnosis will be guess-work, and our treatment as liable if not more so to do harm as to do good. With some physicians there seems to be but one name, and I might add but one treatment, for all diseases of the nose characterized by a discharge. It matters not whether the discharge be caused by a nasal polypus, a sarcomatous tumor, a fibroid, a foreign body, an ulceration, an hypertrophy over the turbinates, or an atrophy of the mucous membrane, it is all called *catarrh*, and is treated in the same manner, by some so-called specific, by means of an anterior or posterior nasal douche, or by the introduction of some irritating powder. These so-called specifics are always irritating and often very painful, so much so that their use cannot be and fortunately is not persevered in.

The practitioner who invariably resorts to this mode of procedure in a routine way, generally knows as little about what is producing the discharge as his unfortunate patient. Is it any wonder, then, that catarrh is regarded as incurable, when it is so universally treated without any discrimination? Almost any medical journal we pick up contains some catarrh remedy vaunted as a *sure cure* without regard to the cause or character of the disease.

Since it is a fact that a large proportion of the communities in which we live suffer with some form of nasal catarrh, does it not seem strange that its pathology is not more generally studied, when the same amount of labor in this direction will give us better results than in almost any other towards an amelioration, and, in most cases, an entire cure of the disease? We have to treat the pathological conditions as we do in other diseases when we reach success. There can be no specific for a nasal discharge that may have so many causes.

If we would proceed rationally then in these diseases, the first thing we should do is to ascertain by a careful examination the cause of the discharge and the condition of the nasal membrane. If caused by a polypus, this must be extracted either with a snare or by the application of chromic, acetic, or nitric acid, or by the thermocautery. If it be caused by a fibroid or sarcomatous tumor, the same means must be pursued, but either will be more difficult to extract than a polypus. If by a foreign body, it must be extracted. If by an ulceration, it must be locally cauterized and constitutionally treated, or both, as the case may demand. If hypertrophic tissue is

found on the turbinates, it must be snared away if large, or scarified if it partakes of the nature of cavernous tissue. All of this should be done with practically no pain by the thorough use of cocaine.

In the meantime, what should be done in these cases, or in others where no tumors are found? Should the anterior nasal douche be used, containing some irritating astringent? Never!—because it does not reach any part of the nasal fossa except the floor, and while it may wash out some of the accumulations contained there, its secondary action of causing the tissues to swell will overbalance the only good it can perform—that of washing the floor of the nose.

Should the posterior nasal douche be used? *Never!* While it can do more good (if effectually used, and not one person in ten can ever learn to effectually use one) than the anterior douche, it may do a great deal more harm by throwing the fluid into the eustachian tube and causing middle ear inflammation.

Then what is to be done when the catarrh is found to be due to an inflammation of the mucous lining of the nose (the result in nearly all cases of a succession of colds), without a polypus, or a tumor, or a foreign body, or an ulceration?

Sprays containing some emollient and non-irritating fluid, such as warmed vaseline, furnish the only rational means of reaching every part of the diseased membrane for the purpose of cleansing and medicating without irritating it. It is necessary that the material used in the spray should be perfectly harmless to the healthy tissues, exert a soothing influence to the diseased tissues, and have a tendency to lessen the inflammation.

These sprays should be applied both posteriorly and anteriorly. After the parts are thoroughly cleansed, any astringent, resolvent, or alterative, such as pinus canadensis, eucalyptol, sandalwood oil, wintergreen oil, pure terebene, or carbolic acid, as the case may demand, may be added to the vaseline spray in small quantities.

It should be remembered, however, that no spray treatment should ever irritate the parts to which it is applied; hence the strength of the medicated spray should be gauged accordingly.

These treatments should be made daily by the physician himself for some weeks, then three times a week, and twice a week, according to the case. In this way alone do I believe that the great majority of the nasal catarrhs can be cured.

As to the constitutional treatment, I do not believe any is necessary except as indicated by the systemic condition. A torpidity of the bowels or kidneys should of course have laxatives or diuretics. A weakened condition of the system will also demand tonics and stimulants, but in most cases no internal medication will be found necessary.

Scarlet Fever and the Puerperal State.

Dr. G. F. Harvey, of Parsons, Kansas, reports to the *Medical Record* the case of a woman who, "on the seventh day after childbirth, got up to have her bed re-made, during which a neighbor's infant was laid upon it; when taken off the child was seen to be covered with a red rash, and it died of scarlet fever during the week. On the following day the patient, having passed a restless night, was found with a temperature of 104° F., dry skin, red strawberry tongue, complaining intensely of headache, smarting of the eyes, and burning pains in the abdomen, limbs, and feet. There was a tendency to delirium, the abdomen was swollen and very tender, the lochia had almost stopped, and had a very offensive ammoniacal odor. Her first child, about two years of age, had been taken sick also through the night, and now presented a clear case of scarlet fever, and in due time desquamated. For about five days the mother's condition was quite critical, large doses of opium being necessary to control the abdominal pains, which were spasmodic in character, and accompanied by an almost constant belching. Recovery took place, there not being any sore throat, rash, desquamation of the skin, or other symptoms of scarlet fever, except 'the tongue' and smarting of the ocular conjunctiva. Since this time the patient has been again delivered normally. I was not present, although called about the second week to treat her for abdominal colic, with eructations similar to those above referred to, and I was told she had had stomache-aches very frequently since, although before her health had been superb. Her first labor was natural. I had acted as counsel at it, in the first stage, during which she had been wrongly instructed to make strong bearing-down effort twenty-four hours before full dilatation occurred. About a month or six weeks after the patient and child were convalescent, the husband, a plasterer, did some work at a house several blocks distant. Precautions had been taken to exclude him from contact with the family. In about three days a little girl came down down with scarlet fever. She had been met outside the house, taken up and kissed, on

the occasion of the first visit of the workman. During the month following six children of this family were attacked by the disease, three of them having severe throat symptoms. The mother, who was very near her confinement, nursed them all through, and while the last three were still in bed, was delivered, a face presentation making a tedious labor, but without any hemorrhage until the placenta was delivered by expression half an hour or more afterward. There was no manual interference in the delivery after the discovery of what was thought to be vertex presentation early in the case—and, contrary to custom, the same with the placenta—so it is very probable there was no abrasion of the parts, as there was no appearance of blood on the child. A point is made of this, as it is thought that micro-organisms do not commonly affect the parts of parturients unless there is some solution of continuity for them to nestle and propagate in. The patient made a good recovery, and resumed her duties on the ninth day. The babe took scarlet fever on the fifteenth or sixteenth day, had sore throat, swelled neck, fever, general rash, and desquamated skin and hair. Scarlet fever had been prevalent about this time, and I had learned of two ladies dying of puerperal fever in our community—one, a primipara, who in the first week had inhaled air that blew over a lawn on which was spread the bedding of a child that had recently died of this fever, and the other was exposed in some way unknown to me. I would gather from these observations that antiseptic precautions are more especially necessary, after instrumental and primiparal labors, during the prevalence of infectious diseases, while it is not of importance in cases which suffer no lacerations of the genitals."

Prolonged Somnolence.

The Paris correspondent of the *Brit. Med. Jour.* (September 4) thus writes:

Eudoxie Hedouin, the patient at the Salpêtrière, who has just woke up after eighteen days' sleep, entered the Salpêtriére Hospital in 1862. Her mother died from cancer of the stomach. During six years she was subject to epileptic attacks, but these occurred after the birth of Eudoxie. This patient cannot give any information concerning her childhood, whether or not she had convulsions; all she remembers is, that she cried out and laughed without knowing the cause. When she was eighteen years of age, epileptic attacks came on, under what circumstances is not known; at the age of 19 she was treated for gastritis; at 21, she miscarried at the fifth month of pregnancy. During eight months she suffered from frequent uterine hemorrhage. During pregnancy she suffered greatly from sickness, but her epileptic fits were not modified. After a series of these attacks, which occurred when she was 22 years old, she became paralytic, and remains so. She first entered the Salpêtrière to be treated for paralysis. Her lower limbs were perfectly rigid; she suffered acute pain in the knees, and the left knee was considerably swollen; she was treated by cupping. She then went from hospital to hospital, and in 1865 was attacked by cholera. In 1886, she again entered the Salpêtrière Hospital. She had grown very stout; the abdomen was greatly enlarged; she scarcely ate anything. On the left side of the abdomen there was dulness on percussion. Examination produced pain, hence it was impossible to ascertain the symptoms. She could move her arms freely, but the lower limbs were paralyzed. On May 7th, 1875, she fell asleep, after taking a purgative. The face was calm; the eyelids frequently quivered, and did not always close over the eyeball. When her head was shaken, she awoke, and said she did not dream. On the afternoon of the same day, she slept a long time; on the 8th she frequently fell asleep, and was easily awoke. On the 12th, her sleep persisted, and continued until the 27th. The following day, the 28th, she made a meal, afterwards laughed violently, and then became delirious. The next morning (29th), her upper and lower limbs were rigid, but the feet were not. Last January she slept during fifty days; she has now just awoke from a sleep of eighteen days. During her attack of somnolence Dr. Voisin placed on her skin an emetic, well wrapped up, without saying anything No effect followed. This was removed, and a piece of paper carefully folded and perfectly empty, was next placed on the patient's skin, Dr. Volsin remarking that "she would certainly vomit." Ten minutes afterwards the patient was sick, which proved that during her sleep she heard. The day after she awoke she was given an empty glass, which she was told contained champagne, and a piece of aloes instead of sugar. Two or three times she simulated drinking from the glass, and then swallowed the supposed piece of sugar, which provoked a slight grimace. She showed all the symptoms of drunkenness. Since she awoke the last time, she eats, drinks, sleeps, and cuts her nails, but her mental condition is not normal. She is now 51 years of age.

The Treatment of Tape-Worm.

Dr. James T. Whittaker thus writes in the *Med. News:*

These remedies may be ranked in efficacy as follows:

1. The bark of the pomegranate root, of which three ounces should be macerated in twelve ounces of water for twelve to twenty-four hours, to be then reduced one-half under gentle heat. The whole quantity is to be taken in divided doses in the course of an hour. Pomegranate root remains the most effective of all anthelmintics, and would long since have excluded all others did it not at times produce nausea, vomiting, and colicky pains. To avoid the first of these evils, Bettelheim suggests the introduction of the infusion into the stomach by means of the stomach-pump, and to obviate all of them, Feraud recommends pelletierin, an active alkaloid of the root named in honor of the discoverer of quinine. One to two drachms of the infusion of senna is to be taken on the morning following a day of fasting, and in the course of an hour one-fourth to one-half of a grain of the tannate of pelletierin suspended in water. Half an hour later the same dose is repeated, to be followed in an additional half hour with a tablespoonful of castor oil, the patient remaining meanwhile quiet in bed, to avoid disturbance of the stomach. In one instance, twelve beef tapeworms were expelled at once in this way.

2. Turpentine is a powerful tæniacide, but the use of it is liable to cause headache, pain in the stomach, fever, and strangury. These effects are, however, much less frequent after large than small doses. Hence the dose for an adult should be never less than one to two ounces, for a child one drachm to one ounce, according to age. It may be administered in emulsion with white of egg or be briskly stirred in half a glass of milk and swallowed rapidly. Should it fail to act as a cathartic, it should be followed with a dose of castor oil.

3. Male fern, the ethereal extract, two drachms in four or five gelatine capsules, of which one may be swallowed every five minutes with the aid of a cup of coffee. A dose of castor oil with brandy should follow the capsules in the course of half an hour.

4. Kousso, koussin, pumpkin seeds, santonin, kamala, carbolic acid, zinc, and other parasiticides of less value.

Every attempt at treatment being a forcible intervention, only such individuals should be subjected to it as are known to be affected. The mere statement of a patient is not sufficient proof, and cases of tæniaphobia do not justify it, on so-called psychological grounds, because failures only aggravate the condition as a rule. Pregnancy, advanced age, debility from any cause, are contraindications to all treatment. The physician must be awake to cases of deception. Heller reports the case of a child finally debilitated by repeated treatment because of the continued exhibition of segments of the worm, when, upon closer examination, it was discovered that the fragments did not come from the child at all, but from a lazy nurse, who made a convenience of the child's stool-chair.

Curable Hypertrophic Cervical Pachymeningitis.

Dr. Edgard Hertz briefly considers the somewhat meagre literature of the subject, and then reports two cases coming under his own observation. In addition, he details two cases reported by O. Berger (*Deut. Med. Wochenschrift*, 1878), one by Féré (*Progres Medical*, 1883), one by Joffroy (*Arch. Gen. de Med.*, 1876), and one by Burtin (*These de Paris*, 1878). From these observations he feels justified in formulating the following conclusions:

1. That the disease is caused in the majority of instances by exposure to cold, living in damp dwellings, and prolonged exposure to currents of air.

2. That an analysis of the symptoms confirms the division of the disease into three periods: pains, paralysis and atrophy. For the latter we may advantageously substitute the term period of trophic disturbance, as in fact a veritable atrophy never exists, the muscles preserving the normal volume.

3. That there is a great excess in the quantity of urea excreted, in one case amounting to seventy-six grammes per litre. Improvement is accompanied by a fall in the proportions of urea in the urine.

4. That the disturbances of the sexual functions follow the same course, at first true satyriasis exists, followed by absolute but temporary impotency.

5. That the course of the disease justifies the title of the paper. Cervical pachymeningitis *is curable*, rarely in the first period of the disease, but during the period of paralysis and trophic changes.

6. That from the observations of Joffroy, Féré and Burtin, sensible amelioration of the symptoms may be expected in about eighteen months. Prognosis is, however, unfavorable when the disease affects the lower extremities; when the bladder and rectum are affected, or when the deformity of *main*

en griffe exists, with wasting of the muscles of the shoulder and the flexors of the forearm.

7. That the prognosis should be favorable in the largest number of cases, and that recovery does not take place progressively, but by sudden improvements followed by temporary relapses, which necessitate continuous surveillance and moderate and prudent interference.

8. That the treatment in the painful period should consist in the employment of anodynes, chloral or morphine subcutaneously, and counter-irritants should be freely applied to the cervical region, particularly scarifications and the actual cautery. Prolonged hot baths are of great service. Electricity exercises a favorable influence over the trophic disturbances. The salicylate of soda is of great value in many cases, as the disease is frequently of rheumatic origin.

Paracentesis Pericardii.

Dr. Samuel Westray Battle thus writes in the *N. C. Medical Journal:*

Samuel Reynolds, brick mason, white, aged 60, native of Georgia, admitted to Mission Hospital, Asheville, N. C., July 21, 1886. Patient is of good physique, fairly well nourished. Gives vague history of rheumatism several years ago. He had been ill for a month, his health generally having failed him. He complains of ill-defined pains in left half of trunk from shoulder to hip, front and rear, but there are no subjective symptoms pointing to the heart or its envelope. Upon inspection the face is observed to be anxious, the respiration hurried and superficial. Closer examination elicits a much enlarged area of cardiac dullness; heart sounds muffled, distant and feeble; pulse intermittent and barely perceptible at the wrist, at times not at all so; hands and feet cold, and a clammy sweat is upon the brow and extremities. Upon consultation with Drs. McGill and W. D. Hilliard, the diagnosis of effusion into the cavity of the pericardium, with imminent heart paralysis, is confirmed, and it is decided to aspirate, and that right quickly. Consent of patient being gained, a valvular incision is made in the skin, in the fifth intercostal space, at a point corresponding to the normal apex beat, this being about the centre of the pyriform tumor made by the distended pericardial sac; a medium-sized aspirating needle, attached to the exhausted graduate, is introduced into the tissues and the stop-cock at once opened, that the fluid may start immediately upon the needle reaching the sac. Straw-colored fluid, to the amount of 17¾ ounces, is withdrawn with the most gratifying results. The pulse has returned to the wrist, the heart-sounds, though still muffled, are easily distinguishable the one from the other; the breathing is easier; the whole aspect of the man has changed, and Mors, at least for the nonce, has relaxed his grip. A glass of whisky and water is ordered, and the following, to be commenced at once:

℞. Digitalis tincturæ, ℥j.
Jaborand. ext. fl.,
Tongaline, āā ℥j.
Sig.—Teaspoonful every four hours.

August 12.—Three weeks have elapsed, and there are as yet no signs of reaccumulation of fluid in the pericardial sac. By noon of the day following the exhibition of digitalis, jaborandi and tongaline, nausea and diaphoresis were produced, and the medicine was given less frequently. Two days later, tincture digitalis and fluid extract of stigmata maïdis replaced other medicine, and these, in conjunction, are still continued. The heart-sounds have cleared, but are not normal, some degenerative change in the valves and walls having been probably taking place for some time.

The first sound has lost its booming quality, having become short and valvular like the second, and is now and then intermittent; no indefinable murmurs. Patient is comfortable, sleeps well, breathes easily and naturally, eats well, and takes daily exercise without discomfort. In fine, there seems no reason why he should not regain his former moderately good health.

Intraperitoneal Injection in Hemorrhage.

Dr. Rutgers, of Rotterdam, publishes, in the *Weekblad van het Nederlandsch Tijdschrift voor Geneeskunde*, a case of dangerous post-partum hemorrhage, which was attended by a midwife, and not seen by himself till four hours after delivery, when the woman was found to be pallid, cold, and almost unconscious. The external hemorrhage had ceased, but coagula were filling the vagina, and internal hemorrhage was still going on. A subcutaneous injection of Wernich's extract of ergotine was given, and the uterus manipulated externally. These measures immediately arrested the hemorrhage, but did not improve the patient's condition of collapse. A little water was swallowed, but immediately vomited. An hour later, an injection of ether was given in the left arm, and some port wine was swallowed

and retained. The condition then improved, and the pulse became perceptible. A saline solution of six grammes of chloride of sodium and 0.3 gramme of hydrate of soda, in a litre of water, was prepared, and heated to the temperature of the body; fifty grammes were injected by means of an aspirator needle, into the right thigh, and both legs were raised so as to cause as much autotransfusion as possible. No effect, however, was produced on the pulse or general condition. It was then proposed to attempt an intravenous injection of the saline fluid; but no distension of the veins of the arm could be obtained by compressing the upper part of the arm. Dr. Rutgers therefore introduced the solution into the peritoneal cavity, in the hope that it would be taken up by the vessels there, and so pass into the circulation. Half a litre was thus injected with great care, and very shortly afterwards the pulse improved, and the patient was able to speak. After this she did well. She complained the next day of pain in the abdomen, and the temperature was for three days below normal. The writer thinks that this case may show the possibility of intraperitoneal injections in desperate cases, and that such injections may not only be well borne, but may have a very rapid and satisfactory effect. He suggests, too, that perhaps this proceeding may be found of value in the collapse of cholera.

Tubercular Ulcer of the Tongue in a Woman; Removal of the Front Portion, followed by Complete Cessation of the Local Pain.

Mr. Vincent Jackson thus writes in the *Lancet:*

Rachel L., aged thirty-seven, an in-patient of the hospital, was transferred from Dr. Malet's wards to those of Mr. Jackson on account of a very painful ulcer of the point of the tongue. The woman had been married for several years, but had never been pregnant, and her family history showed that her youngest sister died of pulmonary consumption, a disease from which she was suffering in the upper portion of each lung. She states that six months ago she perceived a hard pimple on the front "edge" of the tongue, which was not preceded by an injury or by any irritation in the front teeth, which are well formed and free from caries. Three months afterwards an ulcer formed and has enlarged, and on account of the great pain which eating and the various movements of the tongue caused, she was anxious, as all local applications had failed to give relief, for something more to be done.

On admission, the tip of the tongue was seen to be occupied by a shallow ulcer, oval in shape, measuring half an inch across and a quarter of an inch from above downwards. The floor had a greyish look, and was uneven and nodular, the edges being slightly undermined, but there was no surrounding induration, separate nodules, minute ulcers, or enlarged glands.

April 22. The patient being in a semi-recumbent position on a couch, ether was administered, and the mouth being well opened by a gag worked from the left side, the tongue was pulled out and grasped by a pair of long-bladed forceps about an inch from the tip, and about three-quarters of an inch of this portion of the tongue was cut away with scissors. The mucous membrane of the two surfaces was united by ten points of interrupted suture of very fine silk. The tongue being released, and no hemorrhage ensuing, the mouth was closed, and the patient removed.

26th. All the sutures were removed.

May 4. Patient discharged, wound quite healed. The operation has been followed by a complete cessation of all the distressing symptoms complained of previously.

Tolerance of Hydrate of Chloral and Bromide of Potassium.

Dr. L. G. Taylor thus writes in the *Kansas City Med. Record:*

The case reported below shows a rather remarkable tolerance of chloral hydrate and bromide of potassium:

A certain well known gentleman of this city is subject to very severe attacks of headache of a markedly congestive character, recurring at irregular intervals of a week or a month or more, otherwise being particularly healthy.

I was called to him on the night of July 17, 1886, at 11 o'clock, and found the following state of affairs: During the last previous attack he had obtained from a physician this prescription:

℞. Pot. brom., ℥ss.
Chloral hyd., ʒij.
Elixir simp., ʒij.
M. S.—Teaspoonful every hour until relieved.

On the evening of July 17, at 8 o'clock, while suffering with a severe headache, he took what was left of the original bottle—about two teaspoonfuls—and sending to the druggist had the prescription refilled with double quantities—a four-ounce mixture. On receiving it, being rendered unconscious

by excessive pain, he took two doses in quick succession, without care as to quantity, the last dose being taken at 9 p. m. I found the bottle but little over half full, and none having been spilled, he must have taken from the two bottles not less than two ounces of the mixture—that is ℥ss. of the potassium bromide and ʒij. of the chloral.

The patient was in a profound sleep, into which he had fallen shortly after taking the last dose. His pulse was 74, full and regular; respiration 17, and easy; temperature normal; the pupils slightly contracted. On trying to arouse him, he muttered some unintelligible words, turned over, and lay quiet again. I gave him a hypodermic of ♏iij fluid extract of belladonna. At the prick of the needle he wakened and objected, but soon consented and went to sleep again. There being no alarming symptoms, I left at 11:30 p. m., and returned at 11 a. m. On my return I found him still sleeping, but easily aroused and in good condition, though he said he felt quite weak and did not remember anything since nine o'clock the night before. He had slept an apparently normal sleep of fourteen hours.

The Removal of Hemorrhoids Rendered Painless by the Injection of Cocaine.

Dr. J. Prince Stullard thus writes in the *Brit. Med. Jour.:*

The two following cases may prove interesting, as showing the usefulness of cocaine as a local anæsthetic in operating on hemorrhoids.

Case 1. A gentleman consulted me on June 12, 1886, for a painful swelling, saying that he thought that "his seat had come down." On examination, I found a large venous pile, tense and shining, and tending to ulceration, the base of which sprang from just within the margin of the sphincter ani. With difficulty and pain, it was reduced; but, as it descended on the following day, it was decided that it would be best to tie it. The patient was a very sensitive man, and asked that chloroform might be given to him; but, thinking it was a suitable case, I decided to try the effects of cocaine. Five drops of a ten per cent. solution of hydrochlorate of cocaine were injected, by means of a hypodermic syringe, into each side of the base of the hemorrhoid; and, after waiting five minutes, the tumor was seized with a vulsellum, transfixed with a double-threaded needle, and tied in the usual manner. A morphine suppository was placed in the rectum, and, from the commencement of the operation up to complete recovery, a period of eight days, the patient did not experience the slightest pain.

Case 2. On June 17, a young pregnant woman consulted me for a large venous pile, commencing to ulcerate, and occupying the same position as in the preceding case. The same number of drops were injected, and the hæmorrhoid was tied. She experienced no pain during the operation, which was attended by no evil consequences.

In both the above cases, no toxic effects were produced from the use of cocaine. The solution used had been kept for three months, and contained one grain of hydrochlorate of cocaine in a drachm.

Remarks.—By means of cocaine, operations for the relief of hæmorrhoids can be rendered painless, but the effect of the drug soon passes off; and, to ensure absolute freedom from pain, it is necessary to follow it up with morphine, administered in one of its many forms. By using cocaine as above described, the operation is rendered much easier, and can be accomplished by the surgeon single-handed without the help of an assistant, who is indispensable when a general anæsthetic is employed.

Ptomaines.

The following occurs in the course of an article in *Gaillard's Medical Journal* for September, by Dr. L. B. Anderson:

From the foregoing summary we learn:

1. That in the decomposition of animal tissues and juices there are formed certain alkaloids, designated by Selmi "ptomaines," because first discovered in a putrefying dead body.

2. That these ptomaines have been discovered in minute quantities in normal human saliva and urine, and in large quantities in snake poison.

3. That they are found in the secretions of patients laboring under typhus, jaundice, diabetes, ileus, pneumonia, peritonitis, and other morbid states.

4. That they are found likewise in various decomposing tissues and fluids, such as brain, muscle, nerve, liver, stomach, bowels, and all decomposing albuminoid matters, as well as the culture-fluid of bacilli.

5. That some are amorphous, some crystalline, some oily, some very soluble, some very insoluble, some liquid and some gaseous, some bitter and nauseous, some sweet and palatable, some aromatic and agreeable, and others extremely fetid and stinking; some innocuous, and others virulently poisonous.

6. That different qualities of ptomaines

are produced by the same agent in the various stages of the putrefactive process—one being decomposed by newly generated bases, and their constituents uniting to form other and different compounds; while different bodies produce their own peculiar and characteristic ptomaines.

7. That the physiological action of almost all known vegetable alkaloids finds a striking similitude in the effects of ptomaines—some acting on the nervous centres, paralyzing the vaso-motor nerves; others exciting those centres, increasing the action of the heart and arteries; some acting on the muscular system, suspending the peristaltic action of the intestines, while others inordinately excite the contractile fibres, producing violent emesis and diarrhœa; some exciting the secretion, causing the saliva, urine, bile, and mucus to flow more freely, while others suspend those functions, causing dryness and fever; some producing coma, and others wild and wakeful delirium, etc., etc.

Oil of Eucalyptus in Malarial Disease.

Dr. J. H. Musser (*Ther. Gaz.*, June, 1886) gives a critical analysis of the results he has obtained with eucalyptus in the various forms of malarial poisoning. Great care was exercised in diagnosis, and twenty-eight patients were selected for treatment. Of these, nine were cured, ten not cured, five were relieved, but other drugs were used in addition, and five did not report a second time. Analyzing the nine cured cases, one was of quotidian type, five were tertian, one was quartan, and two were irregular. The disease was acute in five, chronic in four. The cases were under observation from ten days to six months. All the attacks developed in the usual malarial season, and seven of the patients resided in a positively well-known malarious locality. The drug was administered in forty-four other cases in which the symptoms showed periodicity and consisted in irregular febrile invasions, gastro-intestinal disorder, and neuralgias. Only eighteen of these cases remained under observation long enough to be of any statistical value. Fourteen patients were relieved and four were not relieved. The former were under observation from five days to a year.

The oil, which is quite distasteful, may be administered in capsules, in emulsion, or in glycerin. Most of the author's patients took it on a lump of sugar. Ten drops are usually given to adults, three or four times daily. The author thinks smaller doses (gtt. iij–v), repeated oftener, would prove more beneficial.

He draws the following conclusions:

1. Oil of eucalyptus is of decided value in about one-third of all the cases of intermitting malarial fever.

2. It has no specific value in any one type of the disease.

3. The longer the duration of the disease, the less liable it is to do good.

4. Relapses are not prevented by it.

5. Its influence on the spleen has not been demonstrated.

6. A dose of ten drops four times daily is a sufficient dose, but five drops every three hours would possibly be of greater value.

7. Good results are not attained so quickly as by large doses of quinine, but a good effect should be observed within five days at least.

Mary-thistle (Carduus Marianus).

Mary-thistle, Steck-kornchen, Chardon-Marie (Carduus Marianus), a syngenesious biennial, formerly enjoyed a considerable reputation. In Germany the leaves of this plant are used against dysentery and hemorrhage, and the seeds in the treatment of spleen and liver enlargement. Tripier had found it of value in the treatment of female diseases. The discredit and disuse into which the Mary-thistle had fallen was difficult to explain, since there was indubitable evidence that it had decided therapeutic virtues.

There was no longer any idea of employing the leaves and flowers, whose chief constituent was tannin. The seeds do not contain tannin, but 25 per cent. of a fixed oil, separated by benzine, but slightly soluble in strong alcohol and still less in 60 per cent. alcohol. It deposits, from time to time, crystals whose reaction is neither that of an acid, an alkali, nor a glucoside. On treating the seeds with 60 per cent. alcohol, a liquor results, which yields on evaporation a gummy, resinous extract in proportion of 12 per cent. of the seeds employed.

Dr. Tripier prescribes ten to forty drops of the tincture. He also uses about one-fifth of a grain of the alcoholic extract, combined with three-sevenths of a grain of aloes against constipation.

These pills do not congest the bowel, and hence do not have the tendency which aloes alone has, of producing piles. Aloes alone in the quantity given, would be useless against constipation, and its action in the present instance is due to the Mary-thistle

extract which stimulates the liver, and the excessive secretion of bile therefrom resulting produces the desired effect. Marythistle seeds are hence of value in liver and spleen diseases and their consequences, and hence have properties similar to those of burdock.

Stilling the Heart by Will-Power.

The *American Practitioner and News* says:

It has every now and then been mentioned as one of the curiosities of physiology, that instances have been noted of men capable of stilling the heart by the power of the will.

As in nearly all other manifestations of peculiar qualities, it will likely be found that this is only an exaggeration of a quality or faculty possessed in some degree as a normal attribute by the race in common. It may be, however, that, in the most remarkable of these cases, the fibres of the spinal accessory, instead of passing off to the superior and inferior laryngeal muscles, pass on to the heart, and give the individuals so organized an unusual voluntary control of the organ. Most persons control the heart's action to whatever degree they are able, either indirectly or unconsciously. It can be done, to a large extent, through the breathing. By taking full breath deliberately, we may often calm an excited heart. In some way, which we shall not attempt to explain, an inhibitory action is exerted over the heart-beat. A continuous monotony of sound or touch will do it. Every one strokes the frightened horse to quiet him, and Poe had got hold of a physiological truth when he wrote—

"To still the beating of my heart, I stood repeating."

Some persons can also exercise an inhibitory control over the heart-beat, in the presence or prospect of danger, by visualizing in imagination the worst the situation may bring, and in this supplement courage to a marvelous degree. Indeed, the relation of this inhibitory control of the heart to the manifestation of courage is a question well worthy of critical examination.

The Hypodermatic Administration of Morphia for Autumnal Catarrh.

Dr. Wm. Moss thus writes to the *Medical News:*

In the *American Journal of the Medical Sciences* for January, 1873, I called attention to the hypodermatic administration of morphia for autumnal catarrh. Experience has confirmed the efficacy of this treatment in relieving the paroxysms of this disease, and in moderating the severity of its annually recurring attacks. I venture to report a typical case, though unfinished, because the season is still at its height, and the treatment is available to those practitioners who have not the opportunity to use local means for the radical cure of this distressing ailment.

September 2, 1886, Mrs. A., æt. 30; disease dates back many years; attack began August 10, several days earlier than usual; went to the seashore for a fortnight, during which time the severity of the symptoms diminished; returned on the 30th, with immediate bad results.

Present condition: Violent sneezing, eyes and nose itching, swollen, and streaming; incessant wheezing cough during the day; at night, severe asthma, necessitating the upright position, and entirely preventing sleep. One-fourth grain of morphia sulph., hypodermatically, gave instant and entire relief, which lasted nearly forty-eight hours. This was repeated on the 4th, 6th, 8th, 10th and 11th, with like result (on the last date sooner, on account of the conjunctival irritation). I shall probably be able during the remainder of the period to keep the attack under control, with half-weekly injections. I have not in this, and other cases, obtained relief by the local application of a six per cent. solution of cocaine hydrochlorate.

Daturine.

Dr. E. L. Shurley thus writes in the *N. Y. Med. Jour.:*

From the known value of stramonium as an anti-spasmodic, and its especial utility in the relief of spasmodic asthma, I was led to give this alkaloid a thorough trial as a topical remedy in affections of this sort.

I have notes of twenty-three cases subjected to experiment, as follows: 1, bronchial asthma; 1, spasmodic asthma; 2, periodic laryngeal congestion; 3, hay-fever; 1, chronic bronchitis (bronchorrhœa); 3, hysterical pharyngeal catarrh; 5, influenza; 1, laryngismus (with ovarian disease); 2, chronic naso-pharyngeal catarrh; 2, acute coryza; 2, chronic laryngitis.

The dose varied from $\frac{1}{100}$ to $\frac{1}{50}$ of a grain, and in some of the cases was repeated two, three, or four times a day; in each case, when the dose was large enough or frequently enough repeated, there appeared to the patient sooner or later the characteristic sensation of dryness of the fauces, etc. The

patients with asthma were not sensibly affected by the treatment; two of those with hay fever were very much benefited by the applications if repeated often enough (it was used in the form of spray), but the trouble was not arrested; three of those with influenza were decidedly relieved by three applications daily of a spray ($\frac{1}{150}$ of a grain), while the two others were not at all relieved. The neurotic cases were only relieved by a diminution of secretion, which, however, lasted but a few hours, necessitating a repetition of the dose. In the other cases I could observe no particular effects.

A Case of General Neuritis—Cure.

Dr. Archinard thus writes in the *New Orleans M. and S. Jour.:*

Bernard Underhill, aged 35 years, born in New Brunswick, was admitted to the Charity Hospital, January 11, 1886, suffering with malarial intermittent fever; no history of nervous disease in his family; his habits are good; he has never had syphilis. On day of admission he was taken to bath-room and while in the bath-tub the hot water was turned on and his back scalded. The burn was superficial, and extended on left side from the scapula to the crest of ilium. He was taken to a surgical ward, where he remained until the latter part of March, when he was transferred to the nervous disease ward, when the following history was recorded, on April 2, 1886:

From the time of the accident related above, to date, patient has never left his bed, first, on account of his burn and fever, and then on account of a paralysis which had gradually begun in the upper extremities and then involved the lower extremities. This paralysis, which began towards the latter part of February, attacked first the right hand and arm, and was accompanied by feelings of numbness, burning, and formication; in a few days extended to the left arm and hand, and by the end of March had involved the two legs. Upon examination, marked paresis with flabbiness of the muscles was noticed, feeling of formication and burning in affected parts were complained of. Tactile sensation and sensation to pain were present, though much retarded; the muscular sense almost lost; incoördination well-marked; no atrophy of muscles; absence of the tendon reflexes; bladder and rectum unaffected; patient has a slight evening fever, intermitting in the morning—this is easily subdued by a few doses of quinia; mind clear; no tenderness over spine upon percussion.

By the combined use of electricity, the faradic current, to which the muscles answered but feebly in the beginning, and a mixture composed of iodide and bromide of potassium, grains vijss, the patient gradually improved, and in five or six weeks was perfectly well, assisting the nurse in the ward.

Phimosis with Exaggerated Symptoms.

Dr. T. M. Holmes thus writes in the *Atlanta Med. and Surg. Jour.* for October:

Some months ago I was called to see a mulatto boy about five years of age, who had been suffering for several days from profuse diarrhœal discharges and frequent micturition. He was very much reduced in flesh; his features were pinched, and his skin was dry and harsh. His eyes were of a smoky hue, and he was almost blind. He also had a papular eruption from the crown of his head to the soles of his feet, with a serous discharge not unlike that of eczema. There was more or less pain in the region of the bladder all the while, which was greatly intensified by the accumulation of a small amount of urine in this viscus. When this occurred, he would run the floor, compressing the abdomen with his hands, and cry in such a manner as to enlist the sympathy of all lookers on. He had been losing his vision for several weeks, and growing very nervous.

What could be the exciting cause of this amaurosis, this diseased skin and nervous phenomena? I sought to discover it, which resulted in finding an almost comple phimosis and partially closed meatus.

The diarrhœa was successfully treated, but with no abatement of the other symptoms. It was evident to my mind that the patient was suffering from a severe nervous irritability, the result of the phimosis, and a slow urœmic poisoning, the solid constituents of the urine having been reabsorbed from the retained urine in the bladder. I first sought to relieve the patient by dilatation, which failed to give the necessary relief on account of the condition of the meatus. I therefore performed circumcision, with the assistance of Mr. George Glover. The result was a complete relief, and a disappearance of all the above symptoms. The boy is now in fine health.

Nitric Acid in Testing for Albumin.

Dr. E. H. Trowbridge (*Medical News*, August 28, 1886), in a note on "A Simple Method of Adding Nitric Acid to Urine in Testing for Albumin," says: We must bear

in mind that the specific gravity of normal urine ranges from 1.015 to 1.022, though some authors place it as low as 1.005 and as high as 1.030. Now the specific gravity of nitric acid (U. S. P.) is 1.420, and dilute nitric acid (U. S. P.) is 1.059, each being greater than that of normal urine. To test the urine for albumin, pour into a test-tube of medium size enough urine so that there shall be a column 2 or 2½ centimetres in height; then with a pipette or small tube take up a column of nitric acid 3½ centimetres in height, or, in general, let the column of nitric acid be a little higher than the column of urine (so better to notice the displacement of the fluids). With the finger firmly pressed against the upper end of the pipette or tube, pass the latter to the bottom of the column of urine, still keeping the finger pressed against the upper end; the fluids will mix according to the force of their specific gravity—*i. e.*, the nitric acid will gradually flow to the bottom of the test-tube, and the urine will rise in the tube to the height at which was the nitric acid. By this method we can more easily and more clearly notice any turbidity which may be formed, and without any agitation of the fluids. The same method can be followed in using acetic acid (U. S. P.), which has a specific gravity of 1.048, or the glacial acetic acid, which has a specific gravity of 1.056–1.058.

Case of Operation in Hydatid Disease of tho Liver.

Dr. E. Hooper May thus writes in the *Brit. Med. Jour.:*

Mrs. C., the wife of a sea-captain, observed an enlargement of the right side, in the region of the liver. On examination, the bulging was found to be very considerable, so as quite to alter the symmetry of the figure. Under the impression that it was a hydatid cyst, the needle of a hypodermic syringe was introduced, and some clear non-albuminous fluid drawn off, the operation being followed by the usual appearance of some spots of urticaria.

On January 12, 1883, an incision about two inches long was made in the most prominent part of the swelling, through the integument, and down to the cyst. This was packed with iodoform gauze, and was dressed over this with carbolic gauze.

On January 19 the cyst was opened, about a pint of fluid, with a good deal of blood, escaping. A tube was placed in the cyst, and a dressing of carbolic gauze laid over it. The operation was followed by another eruption of urticaria. Both operations and the subsequent dressings were conducted under the carbolic spray. The cyst gradually shrank; and, in the beginning of May, the patient was able to accompany her husband upon a voyage; but the wound did not perfectly heal till the middle of June. It may be worthy of remark that the lady was accustomed to fondle a lap-dog.

Elixir Iron Pyrophosphate, Strychnine, and Quinine.

It is prepared by Mr. E. M. Nadal Wilson (Proc. N. C. Phar. Assoc.) as follows:

R.	Quinine sulphate,	135 grains.
	Iron pyrophosphate,	256 "
	Strychnine,	2 "
	Alcohol enough to make	4 ounces.
	Dilute sulph. acid sufficient,	
	Aqua ammonia (strong),	½ "
	Water sufficient.	
	Simple elixir sufficient.	

The quinine is dissolved in a pint of water by aid of the dilute sulphuric acid, and when perfectly dissolved it is precipitated with the aqua ammonia mixed with a quart of water. This precipitate is placed on a filter and washed until traces of ammonia have disappeared. The precipitate is then allowed to drain for some time, but is not permitted to draw. By pouring the alcohol on the precipitate with care, all the quinine is dissolved, after which the strychnine is gradually added and stirred, until thoroughly dissolved. To the resulting solution enough simple elixir is added to make eight ounces. The iron is dissolved in enough simple elixir to make eight ounces. The iron and quinine solutions are then mixed and the result filtered, if necessary. The finished elixir will be of an amber color.

Erythanthema Syphiliticum.

Dr. Edward Bennet Bronson thus concludes a paper in the *Med. Record*, September 4:

From the above considerations I draw the following inferences:

1. That certain forms of erythanthema arising in the course of syphilis may be regarded as products of the latter disease; more especially when they coincide with or are directly followed by an outbreak of typical syphilitic manifestations.

2. That in view of their resemblance to simple angioneurotic or neuritic affections of the skin, it is probable that they also correspond to the latter in their mode of origin; and, while doubtless due primarily to the syphilis, they are not pathognomonic of the

latter disease, and probably not equivalent etiologically to true syphilodermata.

3. And, finally, that the syphilitic erythanthema may, through reflex irritation and in the same manner as the local traumatism, become the seat of a characteristic syphilitic infiltration.

The Diuretic Action of Mercury.

Dr. F. Spiller Locke thus writes in the *Practitioner* for September:

It has long been empirically known that the action of digitalis and squill as diuretics is greatly assisted by the addition to them of a little mercury, and lately calomel alone has been greatly lauded as a diuretic.* The part played by the mercury has never been satisfactorily explained, but the recent work of Noël-Paton† on the connection between bile secretion and the formation of urea seems to have furnished the required clue. Noël-Paton has investigated the action of those drugs known to be powerful hepatic stimulants (from the experiments of Rutherford and others), and the amounts of urea, uric acid, and water excreted by the kidneys of the animal (dog) under observation, and has found that uniformly a direct relation can be traced between the activity of a drug as a hepatic stimulant, and its activity in causing an increased formation and excretion of the most important nitrogenous waste-products. The administration, for example, of perchloride of mercury to a dog in a state of nitrogenous equilibrium, caused a marked increase in the amounts of urea, uric acid, and water, excreted by the animal.‡

The fact that drugs which cause an increased formation of bile also cause an increased formation of urea is of great physiological interest, and gives new ground for the belief, widely held by physiologists, that the liver is the great seat of the formation of urea. The bearing of this fact on the clinical use of mercury as a diuretic is evident. Rutherford has proved that mercuric salts cause a greatly increased formation of bile; this phenomenon is, in all probability, only "the outward and visible sign" of some more fundamental action of the metal, one other result of which is the increased production of urea: it may be mentioned that, according to Noël-Paton, this fundamental action is the destruction of red blood corpuscles.

Now it is well known that an increased quantity of urea in the blood acts as a powerful diuretic. In the frog, if the excretion of urine be stopped by ligature of the renal arteries, the injection of urea into the blood at once causes the excretion to commence afresh (Nussbaum, Adami). In the dog, if, by division of the medulla, the excretion of urine be stopped through lowering of the general blood-pressure, and then urea be injected, the flow of urine recommences (Ustimowitsch). It has been shown, by the method of transfusion, that the addition of urea to the blood transfused causes an increase in the amount of blood flowing through the kidney in a given time, the pressure by which the circulation is carried on remaining constant (Abeles). There is thus abundance of experimental evidence for the powerful diuretic action of urea, and the good effects derived from the use of mercury in combination with digitalis and squill are readily explained by its action on some metabolic process, one outcome of which is the secretion of bile, and another the formation of urea.

In a recent paper, Jendrássik (*loc. cit.; Practitioner*, xxxvii., 45, 211,) has described more fully the results he has obtained from the therapeutical use of calomel. He states that the drug has marked diuretic effects. This is very interesting as being to a great extent a clinical confirmation of Noël-Paton's results. It must here be observed that a diuretic action can only be attributed to mercuric salts, since Rutherford has shown that calomel causes no increased secretion of bile. The diuretic effects obtained by Jendrássik must be attributed therefore either to the calomel used containing a trace of the per-salt, or to its being to a slight extent decomposed in the alimentary canal with formation of the per-salt, as has been suggested in order to explain the great cholagogue effect of the drug. The action of the "blue mass" in Guy's pill must also be explained in a way similar to either of the above; either by its containing a small amount of peroxide, or by a certain quantity of the peroxide being formed in the alimentary canal.

—Alexander Krapotkin, a Russian biologist, physicist and astronomer, who was banished to Siberia in 1874, has recently shot himself in Tomsk.

*Jendrássik, Deutsch. Archiv. f. klin. Med., vol. xxxviii., p. 499. Collins, Medical Chronicle, July, 1886, p. 310. Stiller, Wien. Med. Wochenschr., 28, 1886. [Pract. xxvii. 219.]

†Journ. of Anat. and Physiol., Parts I. and II., vol. xx.

‡In order to prevent misapprehension of a somewhat ambiguous expression, it may be well to add that, although all the hepatic stimulants used by Noël-Paton caused an increase in the urea excreted, and in the total amount of nitrogenous excreta, two of the drugs used, salicylate and benzoate of sodium, caused a marked decrease in the uric acid excreted. The other drugs used, colchicum, perchloride of mercury, and euonymin, increased both the urea and uric acid excreted.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——A brief and well prepared paper on "Puerperal Fever," from the pen of Dr. Jacob Deutsch, of Memphis, Tenn., has appeared in reprint.

——Dr. W. C. Wile, editor of the *New England Monthly*, has reprinted his "Surgical Notes from the Case Book of a General Practitioner."

——A description of the backward dislocation of the fingers upon the metacarpus is given in a short tract by Dr. E. G. Otis, of Boston.

——Dr. John Alsdorf, of New York city, and Secretary of the New York Society for the Prevention of Contagious Diseases, in a reprint from the *Sanitarian*, discusses the prevention and dissemination of syphilis, and points out truly and forcibly the advantages which would accrue to the community from the organization of such asssociations.

——From the New Orleans Board of Health we have a short pamphlet on the Biloxi Fever, indicating that there is little doubt but that it was genuine yellow fever.

——Dr. Nicholas Senn, of Milwaukee, in a paper before us, discusses with clearness the surgical lesions of the brain and its envelopes.

——D. C. Heath & Co., Boston, have recently published two interesting essays, one entitled "Studies in General History," by Prof. Mary D. Sheldon, the other "Modern Petrography," by Mr. G. H. Williams.

——A "Physician's Record," for preserving the clinical notes of cases, has been prepared by M. E. Hawes, East Weymouth, Mass. It is well arranged, and suitable for carrying in the pocket.

——In a reprint before us, Dr. Robert Newman, of New York city, describes the uses of the galvano-cautery in diseases of the prostate, bladder, and urethra.

BOOK NOTICES.

Massage as a Mode of Treatment. By William Murrell, M. D. Pp. 78. Price $1.00. Philadelphia: P. Blakiston, Son & Co., 1886.

The author with creditable boldness says in his preface that the range of massage as a therapeutic measure is very limited, yet it is of no little value in the cases for which it is really indicated. In this small volume Dr. Murrell tells concerning it pretty much all that is essential. He refers to its history, the method of performing it, its physiological action, and the diseases in which positive results may be expected from it. These are paralysis, joint affections, rheumatism, constipation, neurasthenia, and a few others.

Paralyses: Cerebral, Bulbar, and Spinal. A Manual of Diagnosis for Students and Practitioners. By H. Charlton Bastian, M. D., F. R. S., etc. Illustrated. Pp. 671. New York: D. Appleton & Co., 1886.

Dr. Bastian here gives the profession an exhaustive volume on the diagnosis of some of the most obscure diseases which the physician has to encounter. He divides all paralyses into:

1. Those of encephalic origin.
2. Those of spinal origin; and,
3. Those of peripheric origin.

Under each of these headings he considers first the several conditions of a pathological character which would give rise to such a lesion; next, the clinical indications which would favor the existence of such a condition; and then the regional or localizing value of special symptoms that may be associated with the paralysis. A number of diagnostic details are noted which will serve as additional guides to the clinician.

Throughout the work the author's mastery of the subject is constantly apparent, and it must take rank as without a superior in its special department.

Transactions of the Medical Society of the State of West Virginia. 19th session. Wheeling, 1886.

Transactions of the South Carolina Medical Association. 36th Annual Session. 1886. Pp. 91.

Transactions of the Louisiana State Medical Society. 8th Session. New Orleans, 1886. Pp. 306.

Ohio State Sanitary Association. Third Annual Meeting. Columbus, 1886. Pp. 86.

This list of publications indicates the constant and gratifying activity which is visible in the various medical societies throughout our country. There is no one of the volumes that does not contain articles bearing the marks of painstaking and intelligent research. We have not space to analyze each publication separately, but take pleasure in calling to them the attention of readers.

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CHYLOUS ASCITES.

We generally observe but three kinds of ascites. In one the exudation is of a serous nature, in the second it has a milky appearance, and in the third it consists of pus.

The first is the most common. The third is not so very rare, but the second is not only seldom observed, but its nature has never been satisfactorily explained. Letulle (*Rev. de Méd.*, 1886, p. 860), after a series of investigations, has come to the conclusion that the milky character of the discharge depends upon the pressure of chronic inflammation of the peritoneum. According to L., the emulsified fat found in this exudation, and which gives to it its milky color and turbid look, develops from inflammatory products, and is due to a change especially of the pus corpuscles. In evidence of the correctness of his view, he quotes the following case:

A child, æt. 3, in consequence of an uncompensated valvular disease of the heart, suffered with ascites—at least, such was the diagnosis. Paracentesis was performed several times, and after each operation fever and peritoneal pain were observed for several days. The fluid discharged after the first tapping was purely serous; after each following operation it became more and more opaque, and the fourth has a milky appearance. Analysis of the last showed:

Quantity, 1½ litre.
Spec. gr., 1.009.
Reaction alkaline,

Dry residue,	2.010 grs.	in 100 fl. grms.
Fat,	0.150 "	
Albuminoid substances,	1.220 "	
Unorganic substances,	0.640 "	

L. mentions in conclusion, that the milky substance occupies the middle between the serous and the purulent fluid in its chemical position.

NEW PURGATIVES.

Though we have at our disposal a considerable number of laxatives, purgatives, and drastics, but as many of them, generally of a disagreeable taste, must be given in large quantities, and as of pure cholagogues we have but few, the recent investigations and discoveries of Dr. Desnos, in Paris (*Bull. Gén. de Thérap.*, 1886, No. 2), are of practical value.

First, phytolacin, an extract of phytolacca decandra, a chenopodiaca indigenous in our country. In doses of from 0.1 to 0.2 it produced large bilious stools, accompanied by no colicky pains of any kind.

Next, baptisin, the resinoid of a baptisia tinctoria, and juglandin, the resinoid of the juglans cinerea, also indigenous in North America, in doses from 0.1 to 0.3, also cause active and prompt purgation; but these two drugs have certain drawbacks. Baptisin often induces colic, and at least in two cases muco-purulent discharges, accompanied by blood and of a more dysenteric character, were observed after juglandin.

Finally, sanguinarin, of sanguinaris canadensis, a purgative and cholagogue, according to Rutherford, was found by D. totally without effect, even in doses of 10 grains each.

PECULIAR DIFFERENCES IN DECOMPOSITION.

The following interesting case, showing remarkable differences in the decomposition of two dead bodies of persons, who, under the same circumstances, had died at the same time, is reported by Dr. Meyer in the *Viertilj. f. Gericht. Med.*, xliv., p. 101.

Husband and wife, he æt. 72, she æt. 65, had both died the latter part of August from the inhalation of carbonous oxide. Both bodies lay in one bed; both were covered with one and the same feather-bed of not great thickness, and both dressed only in a linen shirt. The small room was quite cold. Thirty-six hours after death the body of the wife was still in good condition, while the face of the husband was already disfigured. Below the skin decomposition had already set in all over the body; at some places the epidermis was raised in blisters, and the skin itself had a brownish-red, and partly greenish color. A week later this great difference in the decomposition of the two bodies was still apparent.

The fact is of some importance in medical jurisprudence, demonstrating the possibility of decomposition, progressed to some extent, developing within the first twenty-four hours.

CAFFEIN AS A DIURETIC.

W. v. Schroeder, after a long series of observations on rabbits, was the first to make the announcement that caffein exerted an energetic, unexpectedly great influence on the secretion of the kidneys. Dr. A. Langaard (*Centrlbl. f. d. Med. Wissensch.*, 1886, July 17, No. 29,) has recently taken up the subject, and in his experiments introduced the remedy directly into the ureters while paralyzing the vaso-motor centre with chloral. L. has arrived at the same conclusion, and has besides discovered that this diuretic action of caffein is produced by the direct action of the drug on the secretory elements of the kidneys, and that it is totally independent of the blood pressure.

A peculiar incident occurs in the administration of larger doses of caffein, viz., the secretion of urine, immediately after the remedy has been introduced into the circulation, comes to a standstill, which period of inactivity is, however, very short, and the diuresis soon shows itself. For the purpose indicated, caffein is best given subcutaneously. Thein, though chemically the same as caffein, has not the same diuretic influence.

NOTES AND COMMENTS.

Calomel as a Diuretic.

Dr. F. H. Collins thus writes in the *Medical Chronicle* for July:

A. M., a strongly-built man, aged 44, of dissipated habits, came under my care on the 20th of April, 1886, suffering from cirrhosis of the liver, severe gastric disturbance, and ascites, with slight icterus. The urine was very scanty, tinged with bile, and loaded with lithates, but free from albumen. His history, condition, and aspect betokened that his illness would terminate fatally.

During the following month he took a variety of diuretics, including bitrartrate and acetate of potash, oil of juniper, and copaiba, first the resin and then the oleoresin. All these remedies, with the exception of copaiba, failed to influence the urine flow in the slightest degree, and as a rule he only passed six to eight ounces of urine daily. He commenced to take copaiba in half drachm doses on the 2d of May, and for four days the urine averaged twelve ounces daily, but afterwards the drug lost its effect. The resin had previously been tried in vain.

His condition got gradually worse till the 19th of May, when I was led to try a mercurial, owing to the diuretic influence which I have noted that blue pill has on myself. I ordered 5 grains of calomel and 5 grains of powdered ginger in a bolus, the dose to be repeated in twelve hours. The bowels acted freely two or three times, and in the twenty-four hours following the first powder 20 ounces of urine were passed, in addition to a further amount passed at stool. During the three following days the average urine discharge was 30 ounces. The dose of calomel was repeated on the 24th, and afterwards given at intervals of three or four days, and the increase in the amount of urine which

the calomel seemed to have set up was maintained for three weeks, the powder sometimes acting as a purgative, but not always. At first the man's condition was decidedly improved, and the abdominal girth decreased by about an inch, but on the 27th he had a slight discharge of bright blood from the bowel, and a little while after his general health failed still further; the bronchitis, which even at the first was a pronounced symptom, became more troublesome, and he died on the 14th of June.

Syphilitic Epilepsy and its Differential Diagnosis from Ordinary Epilepsy.

Dr. Barbier (*Th. de Paris*) thus formulates:

1. Syphilitic epilepsy manifests itself not only by epileptic phenomena, but by attacks which are such a faithful reproduction of the clinical picture of nervous epilepsy that it is absolutely impossible to differentiate the one from the other.

2. It is not due to a special virus, as was taught twenty years ago, but to cerebral and medullary lesions.

3. It is distinguished from essential epilepsy: 1st. By the absence of the cry or the aura, by the mode of succession or apparition of its crises, by the age of the patient, by the cerebral troubles, precocious or late, preceding or following the attacks (cephalalgia, vertigo, fainting, Jacksonian epilepsy)—all characters of a secondary order as regards this diagnostic value, since they are common both to epilepsy symptomatic of a syphilitic lesion and of an ordinary tumor of the brain. 2d. By the frequent co-existence of disorders of sensation in the limbs, especially the lower limbs, and by the frequent abolition of the tendon reflexes—phenomena which possess a real importance from a diagnostic point of view, since they are wanting in ordinary epilepsy, while they are quite frequent in syphilitic epilepsy; in the latter case, the brain and cord are simultaneously affected by the specific disease. 3d. By the effects of mercurial and iodide treatment.

Induction of Premature Labor: Twins.

Dr. J. R. Purdy thus writes in the *Brit. Med. Jour.*, September 25:

"Mrs. J., aged twenty-eight years, consulted me when about six months gone in her third pregnancy. Both her previous pregnancies had resulted in craniotomy. I assisted at the second, and the operation was one of considerable difficulty. So far as I could make out at that time, I thought the outlet of normal size; but the inlet, although not distorted, abnormally contracted. I advised induction of premature labor. She consented, and shortly after the seventh month, I passed a No. 12 bougie, so as to avoid injuring the membrane. Next day the bougie came out during straining at stool. There was no dilatation of the os, but there was slight discharge and pain. The pain soon ceased; and three days later I again passed a No. 12 bougie, this time with success, as pains began twenty hours after the passage of the bougie. I was called to her four hours after the first pain; I found the os dilated, admitting the ends of three fingers, and soft; the head presented high up, in the first position. The pains became very severe, without bringing the head down at all; I therefore decided to apply forceps. Considerable difficulty was experienced in so doing; when they were locked, however, very little traction sufficed to deliver the child.

"On making an abdominal examiuation, preparatory to extracting the placenta, I found the body very large, and felt what I took to be another child. I examined, and found another head presenting at the brim, with bag of waters intact. I turned, without much difficulty, and then brought the placentæ away together. The mother and children did well. Was I right in performing craniotomy?"

Narceine in Whooping-Cough.

The *Medical Record* says:

At a recent meeting of the Société de Biologie, MM. Brown Séquard, Laborde, and d'Arsonval united in praising the effects of narceine in whooping-cough and chronic bronchitis with hypersecretion. Narceine, $C_3H_{29}NO_9$, is one of the alkaloids of opium, but exists in it to a very small amount, at most not over 0.02 per cent. Most investigators agree that in its action upon man it resembles morphine, but is milder and causes no excitement. Claude Bernard first called attention to it by his assertion that it was a safer and more agreeable drug than morphine, but had about the same sedative and anodyne effects. Narceine was carefully tried by several Philadelphia physicians, some fifteen years ago, and they concluded that it was almost inert, even in doses of from one to five grains. Froumüller states that he has given twenty grains with no effect. On the other hand, many Continental physicians (Rabuteau, Behier, Debout,

Eulenburg, Liné, and Laborde) have found that in doses of one-half to one grain it causes quietude and sleep.

The testimony heretofore has been so conflicting that doubts have arisen as to whether the same alkaloid has bean used. M. Laborde now says that a very easy test of its purity is to add to the solution a drop of muriatic acid, when a beautiful blue color is produced.

Surprisingly quick results in whooping-cough have been observed by the French physicians above mentioned. The best mode of administration is to make a solution in syrup, so that a teaspoonful represents one centigramme of the drug. This is the minimum dose for children, the average dose being from two and a half to five centigrammes.

Effects of Drugs on the Sweats of Phthisis.

The *Lancet*, July 3, says that Dr. Abletsoff, who has made a number of accurate observations on the effects of various drugs upon the sweats of phthisical patients, finds that hydrochlorate of pilocarpine, given in doses of a twentieth of a grain, produces no limitation of the sweats in a very large proportion of cases; but its use frequently causes or increases gastro-intestinal irritation and sleeplessness, and, in fact, makes the general condition of the patient worse. With doses of from one-eighth to one-sixth of a grain the diurnal and nocturnal loss of weight almost always increases, and with doses of from one-twentieth to one-tenth of a grain the loss is augumented in the majority of cases. The reasons why this drug has been recommended for phthisical patients are probably to be sought in its expectorant action; but though, as a matter of fact, the amount of sputum daily expectorated is increased by the drug, it has no advantage whatever over other remedies whose effects in other directions are not so deleterious. Homatropine, picrotoxin, and duboisin distinctly decrease the cutaneous perspiration in healthy subjects, the latter drug having the greatest effect. For phthisical patients, however, who are weakened by exhausting sweats, more suitable drugs will be found in agaricin and homatropine, as duboisin and picrotoxin frequently produce other and undesirable effects.

Addison's Disease.

In the *Correspondenzblatt für Schweizer Aerzte*, Nos. 15 and 16, 1886, Dr. Ernest Kummer, assistant to Professor Kocher, of Berne, ably details two cases of Addison's disease, in one of which intense urobilinuria was present. Professor Nencki was able to isolate (by evaporating an amyl-alcoholic solution) about 0.4 gramme of urobiline from the patient's urine, collecting during twenty-four hours. Indican was nearly absent. The author dwelt on the question of the origin of the pigment which caused a "bronze" discoloration of the integuments in Addison's disease. As is known, Professor Nencki and Dr. Berdez have succeeded in isolating the coloring matter of human melanotic sarcoma, the so-called phymatorhusin, which has no relation whatever to hæmoglobin, since it contains more than 11 per cent. of sulphur (*Archiv. für Experim. Pathol. u. Pharmac.*, vol. xx., p. 346), but is closely related to hair-pigment, as Dr. Nadjeda Sieber's researches have shown (*ib.*, p. 362). It would be possible to admit that the pigment of Addison's disease is either phymatorhusin or hair-pigment; but then the urine should contain an increased amount of non-oxidized sulphur. Since nothing of the kind is observed in the disease in question (Lichtheim), the author comes to the conclusion that the "bronze" pigment is a product of hæmoglobin. He supports his view by pointing to an universal diminution of red blood-corpuscles and an absolute reduction of hæmoglobin in Addison's disease.

Reflex Pain.

Before the St. Louis Medico-Chirurgical Society (*St. Louis Courier of Medicine*), Dr. Todd said that frequently patients come with pain, and very considerable pain too, in the ear, generally confined to one ear, and upon examination there is no trouble found in the ear. Of course, in such a case the proper thing to do is to examine the mouth; and in all cases of pain about the ear, the mouth should be examined just as much as the ear itself.

A very intelligent gentleman, occupying a very important position as a city officer, came to him for treatment for pain in the ear. He examined him, and could find nothing the matter with the ear. He examined the mouth, and found one of the molar teeth on the same side with the painful ear which had been filled, and on striking it the tooth was sensitive. The doctor told him that in his opinion he did not have earache at all, but toothache. and that the pain in the ear was reflex; and to make sure that he wouldn't go away thinking that he did not know his business, he went down with him to a dentist

and had him examine the tooth. He removed the filling, and immediately gas escaped, and the patient was relieved of the pain in the ear. This is an illustration of the fact that the physician should have a good idea of dental troubles. The profession neglects them altogether too much, and trusts too much to the dentists.

Local Treatment of Membranous Dysmenorrhœa.

A paper was recently read at the Medical Congress held at Nancy, by M. Paul Landowski, concerning the application of the electro-cautery to the endometrium in cases of membranous dysmenorrhœa. The author stated that it was essential that this operation should not be performed before previously dilating the uterine orifices, and if they were sufficiently large and easily dilatable, a single application only of a prepared sponge was necessary; if, on the contrary, there should be rigidity of the orifices, the sponge must be applied twice, moving the sponge that the electro-cautery should be introduced. It was heated rapidly as it passed lightly over the surface of the endometrium. After applying the electro-cautery, the patient should remain in bed for a week. The application should be made five or six days following the menstrual period. In the case of two patients, of whom Dr. M. Ladowski spoke, one proved a complete success (in the other, the patient passed pieces of membrane the size of a penny during her periods, but she was relieved of pain. It would be interesting to know if the exfoliated processes were only limited to that part where the application had been insufficient.

Cure of Mental Diseases by Hypnotism.

M. Voisin, of Paris, read a communication at the Congress at Nancy, on the possibility of curing mental diseases by the aid of hypnotic sleep. He quoted two cases which lately came under his notice. With the first patient, sleep had not been obtained by adopting the ordinary means of looking fixedly at the experimenter. The patient's eyes were then kept open by means of two palpebral separators, and the rays of the magnetic lamp being directed towards them for ten minutes, produced sleep. In two days, the patient, who at first manifested great excitability, was completely cured. The second patient, a lypemaniac, who had refused food for a fortnight, and had made several attempts to commit suicide, was put to sleep for ten minutes, the first time by hypnotism. On awakening, she acquiesced in suggestions made during sleep, and consented to take milk. The same treatment was repeated every other day, and at the end of a month she was quite cured, and able to return to work.

Paraldehyde as an Antidote to Strychnine.

The property of paraldehyde of greatly reducing the activity of the spinal cord as a reflex centre led Professor Bokai (*Pharm. Post*) to test paraldehyde as an antidote to strychnine poisoning. The results of his experiments made on rabbits, cats, and dogs, were almost invariably favorable. The animals first received a non-fatal dose of paraldehyde, and then an absolutely lethal dose of strychnine was given. In no case did the strychnine produce death. If, however, doses of paraldehyde which are themselves fatal were given to animals, the largest doses of strychnine were not able to remove the poisonous symptoms of the paraldehyde or to delay the fatal processes. It would appear, therefore, that the antagonism between these two drugs is only one sided. On the ground that the hypnotic action of paraldehyde is much more rapidly produced than the poisonous symptoms of strychnine, the *Therapeutic Gazette* suggests that paraldehyde, if given soon after the ingestion of a poisonous dose of strychnine, might serve to antagonize it.

Ringworm of the Scalp.

Alder Smith recommends, as a parasiticide in ringworm of the scalp, chrysarobin dissolved in chloroform—7 grains to the ounce. The chloroform, in addition to serving as a vehicle, dissolves the fatty matters out of the follicles, and thereby facilitates the penetration of the chrysarobin.

A. J. Harrison applies first a mixture of ½ drachm iodide of potassium to 1 ounce of liq. potassæ. When this has penetrated, he applies a solution composed of 1 ounce of sweet spts. of nitre and three grains of bichloride of mercury. His theory is that the liquor potassæ softens the hair-bulbs and hairs, and thereby allows the iodide of potassium to be conveyed to the bottom of the follicles. Then, when the mixture of nitre and bichloride of mercury is applied (the nitre being used merely because it forms a thin mobile menstruum) the mercury comes in contact with the iodide of potassium in the bottom of the follicle and the important chemical change which is there set up—the

formation of the biniodide of mercury—he regards as very important and beneficial.

Piliganine.

Piliganine is an alkaloid which is present in lycopodium saururus, commonly known as piligan or piliganine. Dr. Bardet, chief of the therapeutical laboratory of the Cochin Hospital, tested the effect of an infusion of piligan, and observed that it acted as a powerful emetic, and produced general symptoms which indicated that it was not a suitable therapeutic agent. A chemical examination proved that this plant contained a special kind of resin and an alkaloid which M. Bardet calls piliganine. This alkaloid was isolated by M. Adrian, who gave M. Bardet two grammes of hydrochlorate of piliganine. This investigator made experiments with it on a dog, rabbit, and frog, and concluded from the resulting phenomena that piliganine acted as a poison, and that its influence was principally exercised on the nerve-centres, the medulla oblongata, and pneumogastric nerves.

Turpentine as an Antidote to Phosphorus.

The Paris correspondent of the *Brit. Med. Jour.* states that M. Ed. Rondot (Bordeaux), as the result of clinical observations and experiments, maintains the efficacy of turpentine in the treatment of poisoning by phosphorus, when taken either immediately or even some hours after the poison has been swallowed. The turpentine and phosporus combine, and are eliminated without causing any other morbid phenomena than a local reaction on the alimentary and urinary organs. It is important to administer the turpentine at the outset, so as to neutralize the greatest quantity possible of the poison. Even if it be not completely neutralized, the oil of turpentine renders the symptoms milder and favors recovery. Turpentine diminishes hemorrhage and the nervous symptoms which follow poisoning by phosphorus.

Carbon Bisulphide in Neuralgia.

Guerden recommends, as far superior to menthol in neuralgia, the application, for three minutes, of the following solution:

Carbon bisulphide (rectified),	9 parts.
Oil of peppermint,	1 part.

In superficial neuralgias, whether facial, dental, or intercostal, and in superficial rheumatic pains, this application produces instantaneous relief, and not unfrequently a cure. In the deep neuralgias, as sciatica, it is necessary to project the solution upon the painful part by means of an atomizer. Dental neuralgia usually succumbs to this treatment applied to the corresponding cheek—a slight application to the gum, or the insertion into the carious tooth of a pledget of cotton moistened with the solution being occasionally advisable.

Death from Fumes of Nitric Acid.

Three seamen recently lost their lives upon the American ship *Manopouri*, from an unusual cause. Upon opening one of the hatches, dense clouds ascended, and water was poured into the hold to extinguish the supposed fire. The men who subsequently went below, found that the hold was full, not of smoke, but of far more irritating fumes; and it was ascertained that a bottle of nitric acid, which had been shipped in a case as something else in order to save the extra cost, had been broken. The length of time during which the men were exposed to the fumes is not stated by Dr. J. W. Stickler, who reports the circumstances in the *New York Medical Record*, but no great suffering appears to have been immediately produced; within a few hours, however, the men began to complain of serious illness, and in a very short time died.

Transfusion of Saline Fluids.

At a meeting of the Zurich Medical Society, Professor Gaule made an interesting communication on transfusion of a solution containing 3.5 per cent. of cane-sugar, 0.6 per cent. of chloride of sodium, and 0.005 per cent. of hydrate of soda. As his and Landerer's experiments show, the addition of sugar leads to a rapid regeneration of red blood-corpuscles. Thus, a dog with a maximal loss of blood (5.5 per cent. of the body's weight) showed a normal number of blood-corpuscles in eight days after the transfusion. According to the author, transfusion is indicated—(*a*) when the filling of blood-vessels is altered; (*b*) when the nutrition of tissues is changed; and (*c*) when the function of hæmoglobin is disturbed (poisoning). The transfusion of saline fluids may be effective only in the first case; in the two latter cases, transfusion of blood should be performed.

Cocaine in Tooth Extraction.

Professor Redard and his assistant, Dr. G. Andina, of the Geneva Dental School, have employed hydrochlorate of cocaine as a local

anæsthetic in forty cases of tooth extraction. They used a fifteen per cent. solution, injecting into the gum in average fifty or seventy-five centigrammes of the alkaloid by means of an ordinary Pravaz's syringe. In all the cases, extraction, which was performed usually in ten minutes after the injection, was absolutely painless. No unpleasant accessory effects, except some nausea and heaviness of the head in young girls and children, were observed. The author's results, therefore, coincide with those published by Mrs. Helene Vongl-Sviderskara, of St. Petersburg (see the *London Medical Record*, July, 1886, p. 304), who, however, used far larger doses.

Tuberculosis of the Tongue.

Dr. G. Feurer, of St. Gall, publishes three rare cases of tuberculosis of the tongue. In two of the patients, in men aged seventy-two and thirty-four, the disease was primary, no symptoms of tuberculosis being found in any other organs. A third man, aged fifty, suffered from advanced pulmonary phthisis. In the latter, a cuneiform excision with suturing was performed; the wound healed by the first intention. No return of the disease has followed (two years have passed already). In another, the affected anterior part of the organ was removed by the galvano-cautery. The patient remains well. In the third, the anterior half of the tongue was excised by Kocher's method. The patient died four months later, from meningitis; no necropsy was made.

Uses of Ichthyol.

In concluding his paper on the therapeutic value of ichthyol (to which we have previously referred), Dr. Schmidt statates that the drug possesses pronounced styptic qualities, and is consequently useful in all hemorrhages and wounds. The ichthyol plaster gave better results than any other medicinal plaster used in cuts and wounds. The sticking quality of the ichthyol plaster is so intense that it does not fall off the part even when being washed. He also states that in toothache ichthyol has in his hands sustained its character of a prompt relief-bringing remedy. A drop or two of a combination of ichthyol and chloroform (one to three), placed on a piece of cotton in the hollow of the tooth, or rubbed into the adjacent gum, is certain to bring almost instantaneous relief.

Renal Inflammation from Terebene.

A correspondent of the *Brit. Med. Jour.* reports that a patient who was taking from twenty to twenty-five minims of terebene four or five times during twenty-four hours, suddenly developed intense nephralgia, and the urine became scanty, high-colored, and distinctly albuminous. There had been traces of albumen before, but it was distinctly increased at this time. There was no reason to suspect renal "colic" due to other causes. The terebene was omitted, and gradually the symptoms subsided. After the lapse of three weeks, terebene was again administered, and, as the doses were increased to the same quantity as before, a repetition of the nephralgic symptoms occurred, but less marked than before, and gradually a tolerance was established.

Ethoxycaffeine.

This body is caffeine in which one atom of hydrogen is replaced by the group C_2H_5O. Alkalies precipitate its salts from their solutions. Hypodermic injections in rabbits gave indications of a narcotic action. M. Dujardin-Beaumetz has administered this agent in cases of severe headache, and with beneficial results. Its insolubility is an objection, as is also its tendency, with other allied bodies, to cause gastric symptoms. Most of these difficulties are overcome by dissolving the drug in salicylate of soda and adding some carminatives. The largest dose given was twenty-five centigrammes. Gaurana and Paullinia owe their value in megrim to their containing caffeine.

Condurango in Gastric Diseases.

Dr. Enrique Súñer writes to *El Genio Medico* that, having recently employed condurango bark in the treatment of several cases of gastric carcinoma and catarrh, he has found it very beneficial. He gives a tablespoonful of the infusion every two hours, and in all cases the pain was decidedly mitigated and the appetite and digestion improved. In most cases of mere gastric catarrh the painful nausea and vomiting ceased, and subsequently the patients recovered from the mental depression which was due to the acute gastric disturbance. In the malignant cases, of course, nothing could be hoped for but alleviation of pain, and some improvement in the ability to take and retain nourishment.

The Function of the Tonsils.

Dr. R. Hingston Fox, in an interesting article on the Functions of the Tonsils, in

the twentieth volume of the *Journal of Anatomy and Physiology*, expresses the opinion that these glands belong to the digestive and not the respiratory tract, and that their function is to reabsorb certain constituents of the saliva in the intervals of meals which would otherwise be wasted. He thinks that the view of their having an absorbing function is further supported by the strong evidence of the power of the tonsils to absorb morbid poisons directly from the saliva.

News and Miscellany.

The Pope's Model Cholera Hospital in Rome.

A correspondent of the *Globe* gives an interesting account of the "model cholera hospital" which the pope has caused to be erected in Rome for the accommodation of cholera patients in case of an epidemic. Contact with the outer world is carefully guarded against by grated windows, telephones, and by a revolving barrel with half its circumference open, by which provisions are taken into the hospital. The water-supply is drawn from a well, and is quite separate from the city supply. The drain is formed of an iron tube sixteen inches in diameter, the joints being hermetically sealed with lead. There is a disinfecting boiler in which corrosive sublimate is placed. There is a room called the "chamber of observation," which has a staircase leading up to the first floor. In this room dead bodies are placed for a given time, as it is well known that cholera patients often show signs of being quite dead when really only apparently so. The room is, by means of an electric apparatus, in communication with the director's office. The body being laid on a bed, both hands are put into a sort of copper muff; between the hands is put an instrument so sensitive that, should there be the slightest movement of the hands or any other part of the body, this instrument would instantly close the electric circuit, and the bell in the director's office would be set ringing; at the same moment another instrument registers the number corresponding to the bed upon which the body is lying. The chamber is warmed by steam so as to facilitate resuscitation. The laboratory is provided with a gasometer for the storage of oxygen, which is taken to the wards for administration in gas-bags. On the ground floor are four wards for doubtful cases; should they get worse, they are sent up in the lift to the cholera wards above, their clothes and bed-linen being immediately burned. Another room is set apart for women in childbirth, and there are two more for undressing patients, so that the infected clothes may be destroyed, the Pope furnishing new clothing for all recovered cases. The cubic space allowed for each bed is thirty-six cubic metres. The ventilation is carried on by means of funnels with gas jets below. The chapel is in communication with the sacristy of St. Peter's, so as to form an easy access for the Pope should he wish to visit the hospital; but before returning into the sacristy his Holiness and suite would have to go into a room near it for disinfection. In the event of there being more cases than the hospital can hold, provision has been made for building large sheds in the garden. This hospital was begun in October, 1884, and finished in April, 1885. When the cholera was raging with such violence in Naples, Lao XIII. determined upon making preparations should the scourge visit Rome. It has never been necessary to use it, but it is always ready in the event of an outbreak, and should prove of much use in extirpating it.

Professor Charcot "At Home."

Dr. Kraus, editor of the *Allgemeine Wiener Med. Zeitung*, writes to that journal (Sept. 14), from Paris, a letter, in the course of which he describes a visit paid to Professor Charcot:

"My esteemed patron, Charcot, whose personal friendship I enjoy, had just returned from a holiday tour in Spain when I called upon him. Any one entering the Palais Charcot, in the Boulevard St. Germain, fancies himself in an imperial residence; and, indeed, many a royal personage does not boast of such a palace as this. Charcot is admittedly not only the oracle of French physicians, but an authority upon medicine of the highest rank. We have so often touched upon the biography of this eminent scientist in our journal, and have told our readers so much of his unsurpassable researches, that I need not now devote further words *ad majorem gloriam* of this eminent physician. Who is there among the ranks of medical practitioners who does not know Charcot and his imperishable work in the domain of cerebral disease, metallotherapy, etc? I will not therefore to-day delineate him as the man of science, but as the Paris physician to whose tapestry-covered salon troops of patients make pilgrimage, and lay

an obolus on the table, which groans under the weight of gold—from three to five or ten Napoleons a consultation. How did I know all this, if it were not that the pleasing testimony of this *aurea francogallica* practice lay piled up on the consultation table? To be sure, this modest, amiable, and highly humane French physician does not make a vain show of these offerings of esteem which his practice brings him; he simply has not time to place them under lock and ward, so rapidly does one patient press in after another. The consulting-room contains a magnificent library, which would be the envy of many a medical Universität-Bibliothek: scarcely any important work of old and new medicine, home or foreign, is wanting. Charcot, the Nestor of French scientists, reads and speaks German, and my son and myself were delightedly surprised to see lying on the consultation table the *Allgemeine Wiener Med. Zeitung*, whilst on our entering he laughingly asked whether we knew that journal. Charcot gave us so much of his valuable time that we felt embarrassed, because we had seen what a crowd of patients still awaited his advice in the fairy-like salon. We were proud to secure a written souvenir from him, and a promise to send a paper to our journal. He asked after all his Vienna colleagues—Leidesdorf, Meynert, Benedikt, and proved how exceptionally conversant he is with Austrian and German medical literature."

Chevreul Still Alive.

Chevreul has survived the celebration of his centennial birthday. The next morning after the celebration he went to his business as usual, and later attended the regular weekly meeting of the Academy of Sciences. He took no actual part in the debates, but chatted with his neighbors, and appeared as cheerful and smiling as if nothing had happened. The congratulatory address which the *doyen* received from the Academy of Sciences, Berlin, has been published. Necessarily it is very eulogistic, as the following extract shows: "He who would form a complete idea of your so busily occupied life should follow the entire course of your creative activity, which has been directed to all departments of chemistry. He must follow all the innumerable detailed researches which have enabled you to determine the nature of various minerals and of a large number of salts, as well as the composition of many organic matters. He should study your chemico-physiological works, by which you have made such great advances towards the knowledge of the most important secrets of the animal organism, as well as your labors on the most varied questions of public hygiene. He ought to follow the excursions which enable you to fix the laws of the contrasts among colors, and to class them systematically and scientifically. He ought to study your lectures on the chemical principles of dyeing. He should finally imagine himself at the period when misty ideas of the most false and fantastic kind threatened to surround and obscure the mind, and when, with the record of history in your hands, you dissipated the mists by making your countrymen recognize in the delusions of the past the errors of the present time. Having thus represented in all its extent the activity that you have shown throughout your long life, we hold that your name should be inscribed in one of the first places on the list of the great men who have carried the scientific glory of France to the extremities of the earth."

Speculum from Pompeii.

Before the St. Louis Medico-Chirurgical Society (*St. Louis Courier of Medicine*), Dr. Maughs referred to a translation from a compilation of Aëtius, which he presented at the Medical Society a couple of years ago, and that at one place that author describes a speculum in such a manner as to give a very good idea of the instrument. When he went to Naples to the museum, he found one of the instruments used by the contemporares of Hippocrates, and he had a fac simile made from this old instrument. The original was found in the ruins of Pompeii, and preserved in the museum. This instrument is at least two thousand years old, and may be the instrument Archigenes himself used. In making this fac simile they not only reproduced the instrument perfectly, but they put the rust upon it, so that any gentleman would recognize that the instrument is at least two thousand years old. The patient was placed on her back in front of a window, and this instrument introduced into the vagina, being closed while being introduced, and then the screw was turned. The assistant holds the instrument while the surgeon turns the screw, which is turned rapidly and the vagina rapidly dilated. This instrument being two thousand years old and a little rusty, works a little hard, but it is evident that the vagina can be opened very readily so as to make any application desired. If there was nothing better in the world to-day, this instrument would answer a very admirable purpose.

There are a good many old surgical instruments at the Naples Museum, and if the surgeon had nothing better, he could get along very well with them; there are scalpels, instruments for the removal of stone, delicate little scalpels and hooks, and surgical instruments of all kinds.

Official List of Changes

OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE HOSPITAL SERVICE, FOR THE WEEK ENDED OCTOBER 2, 1886.

Purviance, Geo., surgeon. Granted leave of absence for twenty-five days, September 30, 1886.

Stoner, G. W., surgeon. Granted leave of absence for twenty-three days, October 1, 1886.

Carter, H. R., passed assistant surgeon. To proceed to Galveston, Texas, as inspector, September 30, 1886.

Ames, R. P. M., passed assistant surgeon. Granted leave of absence for thirty days, to take effect when relieved, September 30, 1886.

Wasdin, Eugene, assistant surgeon. Ordered to examination for promotion, September 30, 1886.

Brooks, S. D., assistant surgeon. Granted leave of absence for thirty days, to take effect when relieved, September 30, 1886.

Williams, L. L., assistant surgeon. Relieved from duty at Mobile, Alabama; ordered to Marine Hospital, Wilmington, North Carolina, September 27, 1886.

Perry, T. B., assistant surgeon. Relieved from duty at San Francisco, California; ordered to Marine Hospital, St. Louis, Missouri, October 1, 1886.

Lead-Eating Insects.

A French architectural journal recalls an observation made by Viollet-le-Duc, that lead plates for roofing and other purposes are often pierced by insects. He accused the wasps of being the authors of the little holes which he found gnawed in lead roofs, but later observers have discovered that both worms and flies often drill through heavy plates. Some twenty-five years ago it was found that the lead bullets of cartridges, which had been stored in wooden boxes, were badly gnawed, and a number of gall or saw flies were found in the act of working upon them. Why these little creatures should amuse themselves in digging out the tough metal with their jaws, it is hard to say. Both males and females were found at work; and the only suggestion which our Gallic contemporary can make is that they were, perhaps, sharpening their teeth. The first notice of perforations made by worms seems to have been made by M. Janniard, formerly official architect in charge of churches and public buildings, who observed that the lead covering of the steps on the roof of an old house in Paris was bored through in several places. Only one of the steps was attacked; and, on looking closely, he found that every hole in the lead corresponded to a worm-hole in the oak planking on which it was laid.

A Family Weakness.

We hear of a curious poisoning case from Montreal. Rumors had been current in the east end of the city to the effect that a whole family, consisting of eight persons, had been poisoned through the mistake of a druggist in giving bug poison in place of Gregory's mixture. A reporter of the *Montreal Star* proceeded to make inquiries, and found that the "Gregory" was not in it, and that the true facts of the case were that an elderly person, named Irwin, was taken sick during the night, and got up to take some Dwight's mixture, as he thought, instead of which, the bottles not being labelled, he took a dose of liniment. No evil effects followed this. The next day his wife, who felt out of sorts, took some of the same liniment and was taken violently ill, but has since recovered. The son, some days afterwards, took some of the same liniment, and was also violently affected. The liniment contained belladonna amongst other ingredients, and neither the bottle containing it, nor any of them, was labelled.

Fasting as a Trade.

Signor Succi has succeeded in living through his month's fast, and in proving that he is a person of singular moral courage in mortifying the flesh. His fast was not absolute, since he daily partook of a small quantity of some "red fluid" of secret composition, but there seems to be no doubt that he has abstained from every other form of nutriment, if nutriment it was. French newspaper writers in search of a sensation have been prophesying ruin to the butchers, bakers, and public caterers; and as Succi is to go to Paris, to fast in public, he and his bottle of red fluid will doubtless deeply impress the public; still it is not likely that the shares of the Café Anglais will decline for

this season, though Succi may make a fortune by demonstrating the uselessness of food for a month. For obvious reasons, the fast of Signor Succi ranks rather as a newspaper sensation than as a physiological experiment of any true value.

The Doctor of the Future.

The *New York Medical Times* (homœpathic) in an editorial of true scientific spirit, says: "Go on in your sectarian course, ultra devotees of Hahnemann, if you will; be loyal to the teachings of your master, if you must; but shut not your eyes to the fact that science has rendered obsolete many tenets of his system, and removed the last vestige of an excuse for maintaining an organization of physicians under an exclusive title, distinct and separate from the medical profession at large. That ultra school of medicine has fulfilled the complete measure of its usefulness as a separate organization. Loyalty to truth and progress now demands that it shall drop its narrow sectarian name, and no longer seek to keep its members in leading-strings. In the nature of things there can be but one system of medicine recognized by science. Either homœopathy must absorb the old school or be absorbed by it.

How to Extinguish Common Paraffin Lamps.

We say extinguish *common* paraffin lamps advisedly, because all the better sorts are provided with a special apparatus for covering up the flame. It is wrong, perhaps dangerous, to blow down the chimney, and it is possibly little if at all less dangerous to turn the wick down suddenly. The best plan is to blow not down the chimney, but across the flame at the base of the chimney through the perforated wick chamber, and, of course, always in the direction of the slit through which the wick rises. A very little puff will suffice, and there is no danger in the act, because the flame is not driven down into the oil chamber but simply blown off the wick horizontally. Care must be taken to blow in the direction of the slit, or a great deal of breath may be wasted in vain.

What is Hopeine?

The *Therapeutic Gazette* says that in Iowa the word "hopeine" was on many signs where saloons were formerly kept. The owner of one of these places was arrested for the illegal sale of intoxicants. Several witnesses testified that only "hopeine" was sold at that place. The judge then asked one witness whether he knew the difference between beer and whisky when he tasted it. The witness did. "Now," said the judge, "you will tell the jury whether the hopeine that you drank was beer or whisky, and you will be committed to jail for contempt until you answer the question." "It was beer," said the witness. "At last," continues the *Therapeutic Gazette*, "we know what hopeine is. It is not the alkaloid of American hops; it is not morphine, cocaine, or atropine. It is beer."

Ricinis Communis as an Insect Powder.

A German pharmaceutical paper mentions that cattor-oil plants have been found efficacious in freeing rooms from insect life, the leaves of the plant containing a substance which is fatal to flies and other insects. There is nothing new or remarkable in this fact; but our contemporary draws from it a conclusion which, so far as we are aware, is original, and deserves a trial. It suggests that the leaves should be dried and powdered and the powder used as an insect powder, or that a decoction of the leaves would be serviceable for destroying insects.

Jews and Medical Practice in Russia.

The Russian Medical Department has been collecting statistics showing the number of Jews who are practicing medicine, pharmacy, etc. It seems that in Odessa there are of such 99 doctors (including 6 women), 3 veterinary surgeons, 9 dentists, 35 midwives, 10 feldshers, 19 apothecaries, and 4 apothecaries' managers—altogether 178. It is feared that the authorities contemplate making an order limiting the proportion of Jews allowed to engage in civil practice, in the same way as those in the military medical service are limited to a tenth of the whole.

Poisoned with Nitro-Glycerine.

An extraordinary case of poisoning occurred recently in England, through the swallowing of a quantity of a liquid containing nitro-glycerine. This liquid was prepared and used by a contractor for the purpose of blowing up the old hearths of blast-furnaces. The contractor had prepared a charge of the liquid, and placed it in a bottle in a secure place, where he considered no one could find it. A boy, aged fourteen, however, had gone into the cabin, and taken a mouthful of the liquid, supposing it to be ginger beer. The poison quickly asserted itself, and the boy died in about three hours.

A New Subject for Experimentation.

A correspondent of *The Medical Age*, referring to the occurrence of abdominal pregnancy, asks whether there is anything in the nature of the female peritoneum that renders it more fit than its male analogue for furnishing nutriment to an attached ovum, and if not, why, under favorable circumstances, ova introduced into the male peritoneal cavity might not attach themselves and proceed to a viable stage of development. He also suggests that the young of one animal might be thus grafted upon a different species.

A Scientific Windfall.

The French Academy of Sciences has just been informed of a bequest made by M. Leconte, a real estate owner of Rouen, in Normandy. The old gentleman has, by will, left to the Academy all his fortune, estimated to be fully half a million francs ($100,000). Scientists will gain by it, for most likely the income will be spent in prizes to encourage scientific discoveries, and otherwise soften the hard lot of the poor savants.

Extensive Advertising.

A printing order recently given by the proprietor of a popular remedy was for no fewer than 80,000,000 32-page pamphlets and 400,000,000 4-page circulars, at a cost of very nearly $600,000. It is said that this order will only provide the material for one year's circulation.

Artificial Tape-worms.

A writer in the *Southern California Practitioner* says that the people from the country around Los Angeles go to that city for treatment for tape-worm, and return with yards of tænia in bottles. The worms, he admits, are very pretty, and perhaps worth all they cost, far they are made of celluloid.

The Rewards of Science.

Few men who embark in pure science have been so fortunate as Professor Huxley, who at the age of sixty-two retires with pensions amounting to $7,500, viz., $6,000 as the retirement allowance from his position at the Museum of Geology and Inspectorship of Fisheries, and $1,500 from the Civil List.

Items.

—The *Atlanta M. and S. Jour.* says that Atlanta has an oculist who collects $2,000 a month from his practice.

—A Topeka mother, on being asked by the doctor whether her boy's bowels had moved, replied: "Oh, yes, he had a copious evacuation of the rinctum."

—Prof. Bartholow says that when the cause of jaundice has been removed, salicylic acid will remove the bile pigment from the blood more promptly than any other drug.

—A person brought before a police justice for some criminal offense, was asked his employment, to which he replied that he worked in a spice factory. "What particular work do you do?" inquired the magistrate. Reply: "Adulterate the spices."

—M. Bouchard has managed to induce cataract in rabbits by introducing naphthaline into the digestive canal. The quantity required for the purpose was a daily dose equal to a thousandth part of the animal's weight.

—A Vassar graduate, out in the country, went into the stable of a farm house. "Dear me, how close the poor cows are crowded together," she remarked. "Yes, mum, but we have to do it." Why so?" "To get condensed milk, mum." The sweet girl graduate went off relieved and enlightened.

—"Are you familiar with the analysis of the spring?" he said to Mr. Parvenue at Strathpeffer. "Well," she made answer, "I can't say as I am, but I'm sure there was more analysis in the water to-day than usual, for mine tasted awful."

—Patient: "Besides a headache, I don't seem to ail anything. I eat like a wolf, work like a horse, am as tired as a dog when evening comes, and at night I sleep as sound as a rat." Doctor: "Humph—hadn't you better see a veterinary surgeon?"

—At some villages in Croatia, chiefly inhabited by immigrants from Herzegovina, cholera has been present for some time, but its existence has been kept secret by the inhabitants. Physicians have been assaulted both in Croatia and Istria, the populace mistaking them for poisoners.

—At a meeting of the Berne Medico-Pharmaceutical Society, Dr. Niehans related a case of facial anthrax in a man, aged 50, where he most successfully tried subcutaneous injection of a 5 per cent. solution of carbolic acid, four syringefuls (Pravaz) at a time, around the pustule.

DEATH.

GILLINGHAM.—At Idaho Springs, Dr. H. Gillingham, of Fallsington, Pa., of pulmonary consumption, in his 28th year.